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THE SERVANTLESS HOUSE

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THE SERVANTLESS HOUSE

By

R. RANDAL PHILLIPS, Hon. A.R.I.B.A.

Editor of "Homes and Gardens"

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PREFACE

THIS book first appeared in 1920, at a time when the servant problem was peculiarly acute; the result of post-war conditions. In the time that has since elapsed there has been some improvement, with the cessation of activities that gave wide employment for women, and with the general return to a more normal state of affairs. As a consequence, many who had perforce to be servantless are now able to secure the services of a "daily help," and in view of this it has been considered appropriate to include at the end of this book a certain amount of matter having specific relation to the house where a "daily help" is employed. But the main concern is still the servantless house.

Despite the improvement that has taken place within the last year or two, as just indicated, the servant question remains formidable for many thousands of middle-class folk. One result of post-war conditions is, that keen minds of educated people have been brought to bear on what constitutes the daily household round. The entire working of the home, in fact, has been schemed on lines similar to those which have long been adopted for workshops, factories, and other modern business concerns: the underlying aim throughout being to see how rooms can be planned and equipped so as to save unnecessary walking to and fro, how essential tasks can be done with a minimum of labour and a maximum of effectiveness, and what devices can be introduced to take the brute-labour out of housework.

The purpose of this book is to bring the whole matter under consideration, in the hope that some useful service may be rendered by showing what can be done, at moderate expenditure, to make it possible for a servantless house to be run satisfactorily.

The author wishes, however, to make it clear that he

is concerned with the equipment of the house rather than with details of any daily arrangement of work. Without some definite scheme, of course, no satisfactory result is possible, but households vary so much in their composition that no general plan would apply to each individually, and no useful purpose would be served in attempting to set down an " order of work " or a time-table. Nevertheless, it is considered that some indication of what can be done by household system should be included, and at the end of the book therefore will be found information of this nature. Also, as the reader will wish to know, wherever possible, the cost of various devices and arrangements referred to as saving labour and promoting comfort, a list of prices is given : in connexion with which it is well to emphasize that mechanical aids in the house are a sound investment and well repay their initial and running costs.

Decoration and furnishing, in their general application, are regarded as outside the scope of these pages. The author makes no attempt to tell people how to furnish and embellish their rooms. Rather, for the present purpose, he takes Bacon's aphorism as a basis—" houses are made to live in, not to look at "—and he trusts that the reader will here find sufficient things of practical use to render the perusal of this book not a mere waste of time.

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CHAPTER I

SOME GENERAL CONSIDERATIONS

WE may begin by considering why the servantless house has become such a problem for us at the present time. Many people, if they will admit what they know to be at the back of their memory, will certainly have to confess that some, at least, of the present difficulty is due to the very inconsiderate way in which servants have been treated in the past. While perhaps comforting themselves with the assurance that they never rang the sitting-room bell for the maid to put coal on the fire though the coal-box was beside their chair, nor brought her upstairs to recover a book that had fallen from their hands while reading in bed; still, there was endless work caused through all sorts of unnecessary luxuries, and it was regarded as quite a proper notion that if the girl had every other Sunday out, after she had cleared away the dinner and had possibly laid the tea-table, she was doing well, especially if she also had one evening a week to herself. Then came the War and its opportunities for women to get very profitable work in a score of directions, all outside the house. And girls who formerly accepted the shackle of what was little better than domestic drudgery came into a new liberty. They got good wages for what they did, and they got far more time of their own than they ever had before in domestic service. Whether or not the greater liberty has made them better members of the community is another question ; the fact which we all have to face is that War conditions have left a permanent mark, and we shall never expect to go back to the old conditions. Looking into the future indeed we may picture a time when the domestic servant we used to know shall have become an extinct being. We may see servants ranged together in what will practically be a trade union. Already we have a Women's Legion which

demands not only a very much higher rate of wage for domestic work than ever was paid in the old days, but also makes it a stipulation that a girl shall have specified times for her meals, during which she is not to be disturbed ; two hours off every day ; and every Sunday off from after dinner till 10 o'clock at night : and to these demands have also to be added others for proper sleeping accommodation and adequate food. All this, quite obviously, intensifies an already very difficult problem, and seems likely to make still more people decide to do without servants. They are a mixed blessing, more especially as so few of them are really competent ; and at present rates of living they are expensive. For these reasons many housewives are doing without them, preferring instead to equip their houses for labour saving, and to spend on their own pleasure the considerable balance between this initial expenditure and that incurred by having a maid.

It is only since servants became unobtainable by reason of the scarcity of them, or through lack of sufficient income to bear the cost of them, that the inadequacies of house arrangement and equipment have been brought under serious consideration. But now that educated people are face to face with the task of running their own homes, they are able to appreciate more than ever before the need for improvement. We are all now busy with making the world anew ; and among other things this means the discovery of the home, how to make it as comfortable as possible, and how to eliminate unnecessary work.

CHAPTER II

THE FRONT DOOR

LET us begin the consideration of the servantless house with the front door. I am not concerned here with its design, but with the finish of it, particularly its furniture—that is, its knocker, knob, letter-box, and bell-pull or push, and also with the steps in front of it. We will go into this matter from the point of view especially of what can be done to save time and labour.

A word first as to the finish of the door. This will depend on the kind of house to which the door belongs. An old house, for instance, might have a heavy oak door, which can be left to take care of itself; and such a door can take care of itself very well indeed. But I assume that in the majority of cases we shall be confronted with a painted door, and here I would advocate a good hard enamel surface. There is no paint-work which shows marks so little and keeps its appearance so well as "grained" work, and if in these enlightened days we cannot have skill misapplied in producing what is generally known as "graining," we can without any qualms express ourselves wholeheartedly in praise of "combed" or "scumbled" paint-work, done by running a painter's comb or brush through the last coat, when this is wet, and so giving a lined or wavy surface up and down. A door finished in this way will keep its appearance well without any trouble of cleaning. But plain colours, if finished with enamel, serve admirably too. For a house in country surroundings I would strongly recommend a white door. The illustration on page 13 shows such a door within a pretty little trellis porch. This door has not been painted for five years, and, except for an occasional rub over with soap and flannel, followed by a leather, the door is left entirely alone.

But it is the question of the door furniture that is so insistent. Those who know what housework really is will not need to be told that daily attention is essential if polished brass is to be kept in proper condition. Admittedly the polished brass knocker, letter-box, and electric bell-push look very pleasing and bright on the front door. But when there is no servant to look after these things, one regards the matter in a different light. Some people may think it is worth while, in any circumstances, to have brass furniture and to polish it every day. But others—a growing number just now—have relinquished their former ideas on the subject, and clamour for some sort of door furniture that never needs to be cleaned. Brass-work with lacquer on it will not do, because under weather conditions the lacquer is bound to tarnish and, if left to itself, will get into a most unsightly condition. In the end we are brought to some sort of oxydized or permanent black finish. Door furniture of this kind can be bought from the ironmonger. But I assume that most of my readers are confronted with existing door furniture that has to be polished to keep it in a presentable condition. In order to get rid of that never-ending task, I suggest that the best thing to do is to take off the furniture (it will be found secured in position either by screws or nuts) and to paint it with a good japan black or with " Flinto " ; give it two coats. The surface will be found to be a pleasing one, with a semi-gloss that will maintain itself for a long time ; and even should it wear in places, as on the lower part of the knocker, where the fingers take hold, or on the flap of the letter-box, a few touches with the brush will put the matter right. By way of comment on this I would refer the reader once again to the front door illustrated on the opposite page. Its door furniture is of brass and was kept polished every day. Three years ago it was painted black, and it has not been touched since. If one were to work out how many minutes it took to clean this furniture every day a surprising total for the year would be arrived at. With the brass-work painted black, all this time is saved, and the appearance of the door, with its white surface and black furniture, is very satisfactory indeed.

While referring to this matter of polished brass on the front door, it is worth while noting how people, in their

FIG. 1.—A TRELLIS PORCH.

No Polishing or Whitening : Door furniture painted black, Steps left alone except for an occasional scrub.

worship at the shrine of the polishing rag, seem to be oblivious to the mark which generally is made around the letter-box and door-knocker, keyhole and bell-push, through the impossibility of always keeping the rag on the metal. One can of course have templates cut to fit exactly around the various pieces, but the chances are that these, if not mislaid, would rarely be got out every time the brass needed cleaning. The fact remains that these rubbings around the letter-box, etc., are most unsightly, and their common existence makes an important point in favour of having door furniture with a surface that never requires cleaning.

Then there is the threshold or sill of the door to consider. The usual practice is to have a brass nosing over this. Where such exists, I can only suggest that it also should be japanned black, if the labour of keeping it polished is considered not worth while. But the black surface will not, in this case, prove anything like so satisfactory as on the door furniture, because of the continual tread on the nosing as people go in and out. The best arrangement to have here would be a marble sill, rounded at the front. The existing sill would have to be cut out and the marble inserted in its place. Such a sill of plain white marble looks just as well as, if not even better than, a polished brass nosing, and of course it requires no more cleaning than an occasional wipe with a rag. An alternative treatment would be a piece of stout leather stretched over the wooden sill and nailed in position.

As regards the front steps, the popular practice of whitening should certainly be abolished in the case of our servantless house. Whether there was a servant to do the work or not, this was a foolish practice and a very unsatisfactory one, because the whitened surface, so immaculate when newly finished, soon got besmeared with boot marks, and then the only thing of course was to do the whitening over again. Far better leave the steps to take care of themselves. If they are of stone they will weather, and so have a natural appearance, and we can walk up and down as much as we like without fear of "spoiling" them. And the same remark applies to brick, which makes an excellent threshold. Another treatment is to lay the front steps with tiles, both risers and treads, and to have a lead nosing.

CHAPTER III

THE HALL

IN speaking of the hall one experiences a little difficulty, inasmuch as "the hall" may mean anything from a draughty little passage to what is really a very comfortable living-room. But as a fair assumption for the average middle-class house it may be taken that the hall is more of a passage-way than a room. Not being concerned here with its furnishing and embellishment, I can pass by the merits and demerits of hat-and-coat stands and other impedimenta that serve to confound and confuse the unwary visitor—to confound even the occupants of the house when, after retiring to bed, they come down in the dark for something they have left in the dining-room. The main thing about the hall, as brought within the scope of this book, is its floor. In some parts of the country it is customary to have tiled halls; and this item always appears as one of the allurements in the house-agent's advertisement, in company with that glorious trinity, "bathroom h. and c., main drainage, and electric light." It is generally assumed that a tiled hall is easy to clean, especially with a long-handled mop (an article not so commonly counted an essential of a properly equipped house as it deserves to be), but in reality it is not easy to clean, the only way to do it properly being by scrubbing with soap and water and well wiping afterwards. Against the tiled hall can also be brought the charge that it is noisy to walk upon and cold to the feet; and if there are any chairs about it they are noisy to move. If the house has such a tiled hall, well and good; let the householder accept it, and be thankful that the floor is not one of plain boarding, which, in its probable condition, will not be close-jointed, and therefore a harbourer of dust and dirt and a place through which

draughts can help to make the average house chillier than it usually is in England.

The hall may have a wood-block floor, and in that case the surface will be a very good one, which can be slightly wax-polished; or it may have one of the patent composition floor surfaces laid jointless and with a rounded angle at the skirting. There are several varieties of these composition floorings: "Durato," "Decolite," and "Doloment" are three of them. The material can be put down on any foundation, even over existing boards, and at the present time the cost of it, laid complete, is about 10*s.* per yard super. Thus if, for example, a hall were 4 ft. 6 in. wide and 18 ft. in length, the cost of laying it with one of these composition floorings would be about £5. But I take it that the number of my readers who would contemplate such an expenditure is few as compared with those who do not own the houses they occupy, but simply hold them on a tenancy, and have therefore to make the best of what they have got, without drastic alteration. For such, nothing better can be suggested than linoleum; but it must not be printed linoleum, as the surface decoration is only thin-skin deep, and in a place like the hall, where there is so much walking to and fro, it is not worth while spending money on printed linoleum, because it soon wears to a most unsightly appearance. If a pattern be desired, choose an inlaid linoleum. This will wear admirably. And for a hall especially it is well worth while to get a good quality. Prices to-day for everything in the house are still high as compared with what they used to be, though we are gradually getting accustomed to the figures and adjusting ourselves to the increased expenditure. A good quality inlaid linoleum before the War used to cost 4*s.* a square yard; now it costs nearly double that. For the dimensions which we have already assumed as probably typical of the average house, linoleum for the hall would work out about £3. It will of course be carried right to the skirting, and under this a little, if there is a gap; and it is quite a good idea to nail a small triangular wooden fillet to the bottom of the skirting. Rounded corners are a fetish. Many people imagine that if only they had rounded corners to their rooms they would have made a tremendous step forward in enabling cleaning to be carried out with the greatest ease. But really the ordinary

square corners we find in our rooms never become miniature dust-heaps if the housewife works according to any sort of system; rather it is the mouldings and the ledges above doors and chimney-pieces and window-frames, picture-rails and picture-frames, that provide the places where dust can collect and is awkward to get rid of. But I do commend the simple fillet for the floor angle, because it is an inexpensive device which anybody can adopt, and in halls and corridors especially, with surfaces that constantly need to be cleaned, a fillet to the skirting helps to lighten the work; and in our servantless house we all agree that this is the ideal throughout.

A runner of carpet supplies just what is wanted if the hall is a long narrow one, but if more of an oblong shape we can have a good-sized mat or rug with a short pile that does not harbour dirt. A runner or rug can be taken up with little trouble, and in conjunction with a linoleum or similar surface I think it gives everything we could wish for. But most decidedly it must be of a good length or width, and, unless there are fixing studs, the surface underneath should not be highly polished, to avoid the risk of a nasty tumble through the carpet slipping away.

One other detail I commend for the hall is a mat-sinking next the door. Obviously the reason why the hall gets dirty is because we bring dirt in from outside on our boots. We are not yet educated to the high level of domestic felicity which enjoins the visitor in China or Japan to take off his boots before entering the house. In our English way, all and sundry tramp in; some, to the housewife's dismay, without giving the consideration to the door-mat which its presence clearly demands. To get over this insular failing therefore, or at least to reduce the effect of it to a minimum, it is well worth while to have two door-mats, one on the step outside the door, the other sunk in a shallow recess on the inside of the house. In this way a great deal of dirt which otherwise would be brought in is got rid of at the entrance, and a daily shaking will keep the mats clean.

Lastly, in considering what we shall do with the hall, it is really very necessary to provide an ample receptacle for wet umbrellas. A tall glazed pot is pleasant-looking, but suffers from the defect of insufficiency and from the facility with which it enables one umbrella to be stuck inside

another. The difficulty is to get something that is not unsightly like the umbrella-holders on the end of church pews, yet something which is practical and effective. What is wanted is something which you can just put an umbrella into as easily as you take up a walking-stick. One must admit that the Victorian hall-stand, of sad memory, possessed a merit in this respect. As a fairly satisfactory solution of an awkward problem the illustration below may be considered.

This matter of wet umbrellas is one of the small things of life. But in our servantless house it is the small things that matter, and with just the right sort of umbrella-stand in just the right place we can avoid the drippings down the hall which mean work for somebody, and trouble for the culprit if the housewife is efficient but not generous!

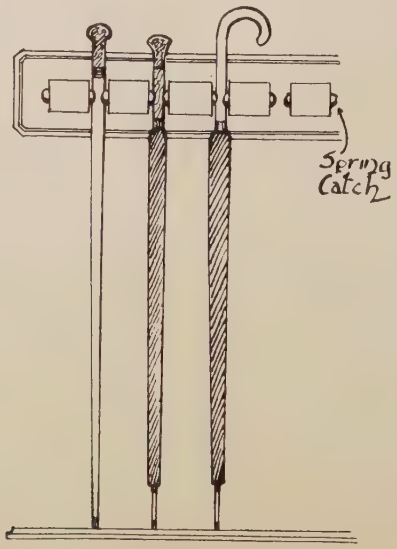


Fig. 2.—A Spring-Catch Holder for Sticks and Umbrellas. *It can be contrived by any handyman.*

CHAPTER IV

THE DINING-ROOM

WHAT sort of dining-room is our servantless house to have? Again I set aside all talk about the character of its furniture and the embellishment of its walls. Regarded from the special point of view which I have in mind, I think the first consideration is the fireplace. Everybody knows that a goodly proportion of housework, at any rate in winter time, is directly due to the dirt and dust that follows from the burning of coal in open fireplaces. Let not the reader imagine that I am now about to embark upon a pæan for the fireless house, where hot-water pipes and radiators keep you comfortable and warm. We all know the failings of the English fireplace; also we know that there is nothing to equal it in the way of cheerfulness and, let us not forget, ventilation. We can sit round a glowing fire and enjoy it, which we can never do around a hot-water radiator; and, with the window open slightly at the top, we can keep the air of the room moving and changing; in which connection it is well to remember that the old ideas concerning impure air which we were taught in our school days, when the proportion of carbonic acid gas was regarded as the infallible test, have been swept aside by modern investigations, and the main fact that now emerges is not so much whether air contains so many impurities or not, as whether it is moving. It is the dead still air that causes mischief. I am, then, an advocate of open fireplaces. But in the house where we have to do all our own work there are many cherished ideas that we must forswear, in face of the everyday toil involved by them, and this must be the case with the dining-room fire.

When servants were possible to get, and people could afford to keep them, meals were always served in the

dining-room, or, as the Georgians used to call it, "the eating-room." But the War altered this arrangement. In many households people found themselves with greatly reduced incomes, and with no servants; and, though respectability might hardly countenance it, the household migrated from the dining-room to the kitchen, where they took their meals, with everything ready to hand; with the fire going merrily in the range, and thus serving the two purposes of cooking the food and providing a warm room in which to eat it. Later in the day the sitting-room would be put to its old use, and a fire there would give the necessary comfort amid pleasant surroundings. And this meant the saving of one fire, as compared with the three (in the kitchen, the dining-room and the sitting-room) which were expected "before the War."

Some people use their dining-rooms much more than their sitting-rooms. There are some indeed who may perhaps speak with a certain superior air when talk is going as to cottage parlours that become cheerless domestic mausoleums, yet who use their sitting-rooms no more than the average parlour is used. On that fact might be based a strong argument for eliminating the sitting-room from the middle-class house and having instead one large living-room—large enough, indeed, to allow a dining-table to be set comfortably at one side of it, leaving plenty of space around for sitting, writing, or reading. I cannot offer any general solution of the problem, because households not only differ in size, but each has its particular notions as to what best suits its particular needs. What I am coming to is that, assuming the dining-room in our servantless house to be used little more than as a place for meals, on grounds of economy it is not worth while to have a coal fire in it throughout the winter. We should reserve this for the sitting-room, doing as much cooking as possible with the gas cooker, and thus reducing to a minimum the coal-consuming voracity of the average kitchen range.

And I make this further suggestion: assuming the dining-room has hitherto been used for little more than a place for meals, an anthracite stove might be installed here. People who have not tried such a stove may immediately discount the idea, saying that they could never sit in a room with a chimney opening sealed up—as it must

FIG. 3.—A DINING-ROOM THAT IS EASY TO KEEP CLEAN. *P. Morley Horder, Architect.*
Note the absence of superfluous furniture and ornaments.

be with an anthracite stove; that such a room would surely be stuffy; that the heat from the stove would produce an uncomfortable flush on the face, headaches, and so on. All of which I admit might be a good argument, if the basis were sound. Let me, however, give the result of actual experience. I occupied a house having the usual

Fig. 4.—An "Omega" Anthracite Stove in a Dining-Room.

dining-room and sitting-room entered from either side of a passage hall, and the usual kitchen and scullery at the end of this. War conditions necessitated economy. Servants had to be got rid of; the housework had to be done by ourselves. Like ninety-nine out of every hundred houses in England, this one had no heating system, and one

FIG. 5.—A SIMPLE DINING-ROOM WITH AN "ESSE" ANTHRACITE STOVE AND PAINTED WOOD KERB.

experienced the usual chilly contrast in going from a warm sitting-room into a cold hall, and so to cold bedrooms. Similarly, one came down into a cold hall and dining-room in the morning. I decided to put in an anthracite stove in the dining-room. I selected one by a good maker and had it fixed in place with a sheet of galvanized iron filling the whole of the chimney opening. The stove itself, which in pre-War days was obtainable for £4, cost me £8 12*s.*; my anthracite nuts cost £3 8*s.* a ton — about 15*s.* more than the price of good ordinary coal. The fire, which was lighted at the beginning of October, was kept going continuously throughout the winter; with the full draught sometimes and on some days, when the weather was very cold; with the dampers closed to their fullest extent at other times and on mild days. The stove gave out a most admirable heat, and its mica front being a large one we got a pleasant sight of the glowing fire within. The room was thoroughly well warmed; at meal times we had the door shut and on the coldest days we felt quite comfortable, and it was only necessary to open the window slightly at the top in order to get the movement of air that I have already referred to as so essential. When we were not using the dining-room, and always at night, the door was left wide open, and in this way a lot of warm air passed into the hall and up the staircase, appreciably warming the house. Thus we gained a considerable measure of comfort with very little attention indeed, because the stove only needed filling twice a day, and its ash-pan removed and emptied once a day, and this without any of the trouble with ashes and dirt that is associated with the ordinary fireplace. Therefore, taking my own experience as evidence, I say that the anthracite stove will prove a boon in the servantless house. It can of course be put in the hall, which is supposed to be the proper place for it; but in my opinion this does not meet the requirements so well as putting it in the dining-room.

In support of its efficiency, and with regard to its running cost, I give the following figures derived from personal test: *Efficiency*: In a bedroom upstairs, where there was no fire, the temperature on a certain morning was 48 degrees. In the sitting-room downstairs, where there had been a fire overnight, it was 51. In the dining-room at breakfast time, when the anthracite was burning nicely, the temperature

HEAT AND RADIATORS FROM AN OPEN FIRE.

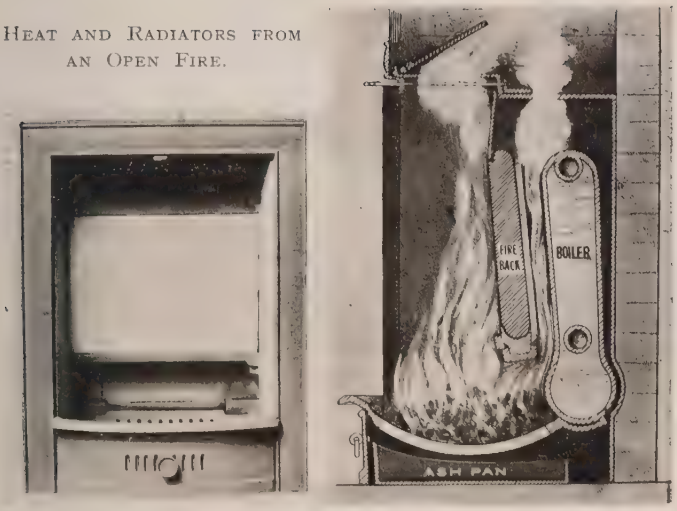


FIG. 6.—THE "WARMALL" GRATE.

This gives a double service, the heat which is usually wasted up the chimney being utilized by a back boiler to which radiators are connected.

FIG. 7.—PITHER'S "UNIQUE" ANTHRACITE STOVE.

This can also be fitted with a boiler at the back for bath supply or radiators.

FIG. 8.—THE "FLORENCE" BOILER GRATE.

This burns anthracite as an open fire.

was 60. *Running Cost:* The stove required 7 lbs. for each charge, night and morning, and with anthracite nuts at £3 8*s.* a ton this worked out at 5*d.* a day. Incidentally it may be noted that very few householders have any exact idea as to what their ordinary coal fires are consuming. I tested my sitting-room fire—a hearth fire, and therefore economical of coal. It burnt a scuttleful in a day, from 10 o'clock in the morning till 10 at night. Having weighed the coal beforehand I thus ascertained that my fire consumed 21 lbs. in twelve hours, and as the coal (Derby Brights) was £2 12*s.* a ton, the cost of the fire was 5*d.* a day; that is to say, it cost as much for twelve hours as the anthracite stove did for twenty-four.

It is of course possible to substitute a gas fire for the ordinary coal fire, and with gas there is no trouble at all. But, personally, I prefer the anthracite stove as a more effective expedient. If, however, there is to be neither a gas fire nor an anthracite stove, but nothing less than the ordinary coal fire, then have a hearth fire; and it is well to remember that it is possible to have a boiler grate (for burning ordinary coal, as in the "Warmall," or anthracite as an open fire—the "Florence") which will heat two or three radiators as well. But if expense precludes this, then get one of the barless adjustments, which can be fixed in front of any fireplace. These greatly increase the heating efficiency. Moreover they enable grates to be cleaned up with reasonable ease and do away with all the blackleading of fire-bars which is an inevitable daily toil for anyone who is not prepared to accept the unsightly appearance of an ordinary firegrate left to go as it pleases.

While dealing with this question of the fireplace a brief reference may be made to the hearth and its treatment from the point of view of saving as much labour as possible. Everybody who knows what work is entailed in keeping a stone hearth clean will agree that this is a most undesirable thing in a house where there is no servant. Such a hearth cannot be left untended. With the dust and ashes from the fire it soon gets into a most untidy condition; and we have always to remember that there is nothing which makes a room look more shabby than a dirty fireplace. Whitening is practically the only remedy for a stone hearth, but this means a task on one's knees every time a fire is

lighted; so the stone hearth must be got rid of. The best thing in place of it is a tiled hearth. Such a hearth is quite commonly found now in modern houses, and even where there is only a stone hearth, tiles can be laid on top of it. Glazed tiles three inches square are the best, and any handyman in the house can lay them in the following way: Assuming there is an existing kerb, get some strips of wood about three inches wide and an inch thick and lay them around the hearth. Then with some tile cement and water make a thin paste. It is worked up best with a trowel, but if this is not at hand, an old knife will serve the purpose quite well. See that the cement is thoroughly well mixed; turn it over and over on a piece of board, adding more

FIG. 9.—A "BEWTY" BARLESS FIRE ADAPTED TO AN OLD GRATE.

These adapters eliminate blackleading of bars, are easily cleaned, and give a hearth fire with a very considerable economy in coal consumption.

water or more cement till the right consistency is arrived at; but be careful with the water, because one is apt to add too much, and then the cement becomes too thin and runs about awkwardly. Lay a thin coating on top of the hearth, about half an inch thick, carrying it right under the firegrate. Then, having wetted them, put the tiles in place, tapping them down with a piece of wood, and seeing that each is square in line. By a little adjustment you can arrange the width at the front so that there is no necessity for any cutting, which is a difficult business with tiles; but at the sides of the grate undoubtedly some cutting will be necessary. It is done best by cutting the tile on each face with an old saw, and then snapping it over some square edge; or corners can be worked off with a big pair of pincers. This part of the work, admittedly, requires a certain amount of skill, but it will be found that after a few attempts it can be neatly done. Odd corners can be filled with broken pieces of tile and a little cement.

As to the fender, polished brass ones, either plain or pierced, are as nice as anything one could wish for, but here again we have to consider the work involved in keeping them clean. The only alternatives are a plain iron kerb with an enamel surface burnt on, or a tiled kerb. The latter is generally purchasable with a rounded tile edge; it is, in my opinion, generally a rather deplorable-looking object in a room, but one can have instead a kerb made up with square tiles like those used on the hearth. A tiled kerb of this sort has a very presentable appearance. The illustration on page 34 shows one: it is built up on a wooden core, the tiles being held in place and their unglazed edges covered by a strip of copper nailed on to a fillet. Similar wooden cores can be covered with black velvet or leather. Or a painted wood kerb can be used (one is shown in the illustration on page 23).

The next point to consider in the dining-room of our servantless house is the floor covering. Here, once more, different people will have different opinions as to what is desirable. Some think there is nothing so good as an oak floor, made up of either parquet blocks or narrow strips, waxed and slightly polished, with rugs spread about. Others prefer an all-over carpet. Others again will plump for a good square or rectangle of carpet that covers the

bulk of the room, with staining, felt or linoleum for the surround. Let us take these in ord

First the polished oak floor. This is an expensive item, and the chances are that in the bulk of houses such as we are now considering it will not exist. Of course if one is building a house for oneself or making improvements in a house already possessed, the provision of such a floor may be considered, but, as the reader will have realized, I am chiefly concerned in this book with what can be done to ordinary houses held on ordinary tenancies. Nobody is going to put down oak floors for the ultimate benefit of the landlord. I think therefore this treatment can be passed with a very brief reference. In the days before the War it used not to be so expensive a matter to lay a parquet veneer floor, but now, like everything else, the cost has increased enormously. Moreover, I think that in small rooms such floors, covered with a few rugs, are not quite happy, and a particular point I have against them is that already referred to in connection with the hall, namely, that rugs on a polished surface are prone to slip about, and therefore objectionable. Clearly, if one is contemplating the provision of a parquet floor it is foolish to proceed to obliterate it with big rugs or squares of carpet; and from the hygienic point of view I think that the claims can be greatly exaggerated.

Now comes the second method—the all-over carpet. As regards appearance of comfort, there is I think nothing to equal this, but it is the most extravagant method of furnishing, as it means cutting a carpet to fit a particular room, and if one should move to another house the chances are that the cut carpet will be almost useless; so this also can be put aside as not the most desirable treatment for anyone with moderate means.

We come then to the last and best method, bearing in mind economy and convenience, namely, the arrangement of a square or rectangle of carpet to cover the bulk of the floor, with felt or linoleum for the surround and corners—or simply a stain on the boards. The choice between these three treatments of the surround raises at once the question of cleaning. My own view briefly is this: that with a vacuum cleaner a carpet can be kept in a perfectly wholesome and clean condition, and this with little trouble. I

deal with vacuum cleaners in another chapter, and need only here say that the felt around the carpet presents no difficulties in being kept clean ; and, provided it is a good colour, either a subdued shade of brown or blue, it looks better than anything else around the carpet. Of course if one is going on in the old-fashioned style with a brush, banging over the carpet and raising a cloud of dust that simply settles all over the room, the suggestion could never be approved by any experienced housewife. But a vacuum cleaner makes the whole difference, and with it a carpet and a felt surround can easily be kept in a perfectly satisfactory condition. Sweepers will, of course, take up a good deal of dirt, but one has only to go over a carpet with a vacuum cleaner after an ordinary sweeper has been used on it to see that the latter leaves plenty of dirt in the pile ; and as the whole art of making a carpet last well consists in keeping it free of dirt particles, which are ground in as one walks about, it must be admitted that the vacuum cleaner is by far the more effective arrangement to use.

For those who prefer a linoleum surround I recommend a plain brown one in place of the familiar pattern which masquerades as parquet ; while for those who do not approve of felt, and wish something less expensive than linoleum, I recommend one of the floor stains.

Furnishing and decoration not coming within the scope of this book, there is not much more to be said about the dining-room, but I would just add a note in favour of hanging pictures on nails, instead of the more generally accepted picture-rail. Many seem to regard a picture-rail as the acme of desirability in any room ; but, as I have already said, it is a veritable dust trap, very awkward to get at ; moreover, to me, the long cords supporting the picture from the hook that hangs on the rail are unsightly, and entail more trouble when pictures are taken down for cleaning than occurs with frames hung by a short cord on a nail (the cord should not show at all, being just taken across the back of the frame and made sufficiently tight, so that both it and the nail are out of sight when the picture is hung).

Cupboards in the dining-room are a good feature for the servantless house. They can be arranged very well in the recesses that are on either side of the fireplace. Their great merit is that they provide storage accommodation for many

things that are wanted at meal times and that cannot be accommodated in the sideboard. The great thing in the servantless house is to have everything handy in the place where it is wanted, and cupboards in the dining-room greatly help to secure this. Frequently a sideboard has very inadequate accommodation, either in the form of drawers or cupboards, with the result that many things have to be constantly carried in and out from the kitchen, or wherever they are stored. It is not suggested that a dining-room should become a general store place, but certainly plates, cups and saucers, serviettes, tea and breakfast trays, and other things for the table should all be kept in the room, so that there is a minimum of trouble in getting them out and putting them away again. The sideboard is supposed to serve this purpose, but generally it is wholly insufficient, and that is why cupboards in the dining-room are to be commended; with them indeed one can eliminate the sideboard. The cupboards should be solid fronted, with plain panels. A glass front would expose to view things that are best kept out of sight; besides, there is always this to be remembered about glazed cupboard fronts, as compared with solid wooden ones—they entail constant trouble in keeping them clean. It is quite a task to go over all the panes in a glazed cupboard front, yet this must be done if they are not to look disreputable, especially at the time of the year when flies are about. With the solid wood front there is no more trouble than there is with the painted door, which requires cleaning with soap and water only very occasionally —certainly not more than three or four times a year.

CHAPTER V

THE SITTING-ROOM

ONE uses the word sitting-room in preference to drawing-room as it implies a more reasonable outlook on domestic life. In the old days the with-drawing room was a place where the ladies used to withdraw, while the gentlemen settled down elsewhere, ultimately under the table. But in the modern contraction of the term, " drawing-room " has the smack of some rather artificial place for special occasions only, where everyone is supposed to be on his best behaviour. The fallacy underlying this idea unfortunately still persists, and too often we find, in the drawing-room, pieces of furniture that are obviously not fitted to our use, chairs perhaps so eager to be delicate-looking that a heavy person sits down on them with trepidation lest their elegant legs should collapse in one awful moment ; occasional tables, too, with hardly so much demand on their services as the name implies ; and other things of the same kind. As however I am not setting out to say how a room should be furnished, we can pass this by with a bare reference. But it comes very properly within my scope to emphasize that no servantless house can ever be run with a minimum of trouble if rooms are filled with superfluous furniture, and ornaments are scattered about with a profusion at once baffling and exasperating to those who have to pick up each one of them when " dusting." The great thing after all is to have sensible rooms that look as though we really used them and enjoyed living in them, with furniture that meets our everyday requirements, and with just sufficient ornaments or other features of decoration that add an element of gaiety and refinement, while not entailing endless work in keeping the place in a reasonable condition of cleanliness.

What I have already said in connection with the dining-room, as regards fireplaces and kerbs and surrounds, applies equally to the sitting-room, so there is no necessity to repeat

FIG. 10.—A SITTING-ROOM IN A LONDON FLAT.

Illustrating an effective floor covering with rugs on felt; it is kept in perfect condition with a vacuum cleaner.

the matter: but in regard to the fireplace I would emphasize the merits of the modern well or hearth fire and, in a servantless house especially, the saving of labour that is effected by having glazed surfaces around, either in the form of tiles or bricks. There is merit, too, in the open fireplace burning wood in the old right way, with dogs on a brick or stone hearth. A wood fire involves very little

FIG. 11.—A SITTING-ROOM FIREPLACE THAT NEEDS A MINIMUM OF ATTENTION.

The grate is of coppered cast-iron that never requires cleaning, the hearth is of glazed tiles, and the kerb is of similar tiles mounted on a wood core. Incidentally this shows how a grate can be filled with pine cones in the summer.

FIG. 12.—A MODERN HEARTH FIRE WITH TILE SURROUND AND HEARTH.

work in maintenance, the fireplace requiring no daily cleaning other than keeping the ash together and occasionally removing it. And the absence of smoke such as that given off by a coal fire means another saving in ultimate room-cleaning. For the rest, there is nothing that calls for comment, and the sitting-room can be finished with in this very short chapter.

CHAPTER VI

THE KITCHEN AND SCULLERY

NOW we come to the most important part of the house, from the point of view of its daily working without a servant. The arrangement which we find in the average house is wholly out-of-date and inconvenient. It offers us a good-sized kitchen with a range in it and a dresser, and sometimes opening out of it, but more often cut off by a passage, is the scullery, where there is possibly nothing better than a shallow sink with a draining board on one side only, a copper built into one corner, and a wide shelf holding a large number of utensils in the most awkward and unsatisfactory way that could ever be devised.

Most people cannot build houses for themselves ; they have to make the best they can of what is available. I will endeavour therefore to indicate what can be done with existing arrangements to make them easier for carrying on the daily work of the house. But first I should like to deal with the general plan of the kitchen and scullery. The common arrangement, indicated above, is entirely wrong when regarded in the light of present-day facts. If one assumes that there is a servant in the house, the idea that the kitchen is a sufficient place, both to do her work in and to spend her leisure, cannot be successfully defended. No one for choice would care to spend all their time in one room, and the rising status of the servant is effecting a drastic change in house arrangements. In modern plans it is becoming quite common to see next to the kitchen a room which the maid can use as her sitting-room when her work is done. Bearing this in mind, and remembering that in the future it is likely that servants will be even more difficult to obtain than they are to-day ; that they will probably be banded together in some sort of trade union, which will

FIG. 13.—A WELL-EQUIPPED KITCHEN-SCULLERY. *Charles Spooner, Architect. The sink is a good deep one, with hot and cold taps over it and ample draining boards on either side, and below the latter are coal hoppers (filled occasionally from outside), with hatches that avoid the necessity of going out for fuel. The floor is of jointless composition; the gas stove has a hood which takes away all fumes and smell; and three windows give excellent light.*

insist on certain minimum requirements ; it may be assumed, I think, that instead of the separate kitchen and scullery, inconveniently placed and equipped, we shall have a kitchen-scullery and a maid's sitting-room, and as indicating what is a very practical development, I would refer the reader to the accompanying illustration (Fig. 13) of a kitchen-scullery in a house at Hammersmith. Everything is ready to hand in this room. On one side are three sash windows which not only light very admirably the sink and its draining boards, but also throw a good left light on to the gas cooker —which, it will be noted, has a hood over it. It is a very great convenience to have a hood over the gas cooker, though this admirable feature is absent in most houses. All the fumes, both from the gas and from the cooking, go up into the hood and so are taken away into the chimney, and the room therefore is free from that smell and stuffiness which is the common experience. Opposite to the windows is the dresser, so that things which have been washed can be put away without much walking about, but it would be still better if this kitchen-scullery had some well-arranged racks on the walls above the draining boards. A copper is also accommodated in the room, and with this provision for washing days it is altogether a very complete domestic workshop. If such a kitchen-scullery as this is compared with the ordinary arrangement of a separate kitchen and a separate scullery, as provided in the average house, it will be seen how very much more easily the work can be carried out.

Another feature of the equipment in this particular example is the very ingenious arrangement for getting coal under cover. The space below the two draining boards on either side is entirely enclosed, and hoppers are arranged inside. These hoppers are filled from the outside about once a week, from the coal store, and it is only necessary to lift up one of the hatches shown in the photograph to get as many shovelfuls as are needed. The convenience of such an arrangement is obvious. It is just one of those small things which collectively make for comfort in the working of the house.

Leaving what we would call the ideal arrangement, however, and coming back to facts as we find them, let us consider what can be done to make the average kitchen more convenient.

FIG. 14.—A TRANSFORMED BASEMENT KITCHEN IN A LONDON HOUSE.

The original kitchener has been covered up with a sheet of asbestos-cement and a gas fire fitted in front of it; a gas stove serving the cooking needs.

Improving the Kitchen Dresser

It would be difficult to determine when the kitchen dresser was given its familiar form, but in whatever period it was evolved, the form has persisted without questioning on the part of those who have designed and built our houses. Presumably the architect has just marked the place for it on his plan, and the builder has filled the space in the way he was always accustomed to fill it, namely, with the ordinary dresser. But every housewife knows that this is by no means satisfactory, and it is time that something far better was substituted. We can, if we wish, eliminate it altogether, and put in its place the much more convenient kitchen cabinet. With this I deal fully a little later.

For the moment let us consider what can be done with an existing dresser. In the improvement of it the obvious first thing to do is to have cupboards, and perhaps some drawers, in the space below the table-shelf. Two cupboards will be ample, and there should not be more than two shelves dividing them, otherwise it will not be possible to reach conveniently to the back of the cupboards. The front should be closed in by doors, and as wide doors hinged at the side are not altogether convenient, sliding doors can be adopted instead ; or the space in front can be divided into three portions, the centre portion being kept solid and the outer portions opening to right and left. About the house there is always a daily increasing collection of newspapers, and one of the shelves in the remodelled kitchen dresser will be found just the place for keeping these tidily together ; also one of these cupboards is a very handy place in which to store children's toys and possessions, which otherwise get left about all over the house (Fig. 15).

With regard to the upper part of the dresser, undoubtedly it is best to cover in the whole of this, as dust is thereby excluded. A cheery appearance is given if the enclosing doors have panes of glass, but these, of course, will need attention in cleaning, and when everything is considered it will be found best to have solid wood doors for the dresser front ; these, however, should not come down to the table-shelf, but should finish level with the lowest of the tiers of shelves.

The common practice is to have plates arranged straight

The left-hand cupboard is a convenient place for keeping newspapers, brown paper and oddments.

The right-hand cupboard is most useful for keeping the children's toys together.

FIG. 15.—AN ORDINARY KITCHEN DRESSER FILLED IN WITH CUPBOARDS BELOW THE DRAWERS.

The space, with its out-of-date pot-board at the bottom, is usually left unused; but these illustrations show how it can be turned to very good account.

FIG. 16.—A MODERN DRESSER.

Dust is entirely excluded, and there is good accommodation for everything—including the tea-tray (which fits into the space above the drawers). The glazed doors, it will be seen, open clear of the things on the shelf.

across the dresser, just as it is also the common practice for the shelves to go right back to the wall, but a much more compact arrangement is to stand the plates diagonally, while with regard to the shelves it should be borne in mind that if

a small space is left at the back – just sufficient for the finger to pass behind—cleaning can be done much more easily.

All that has been said here, however, is what we may call making the best of an existing thing. Really the design of the dresser should be started from a fresh standpoint altogether. The illustration on the opposite page (Fig. 16) shows a modern dresser designed with special workaday needs in view. Its special features are noted in the subtitle to the illustration, and it is only necessary here to add that the total height of the dresser is about 7 ft. 6 in. and the width about 3 ft. 6 in.

FIG. 17.—AN ENCLOSED DRESSER WITH SLIDING DOORS.

This dresser extends across one side of a small low room. It has three sliding doors, with drawers below, and when the front is closed it presents the appearance of panelling.

The Kitchen Cabinet

This is a feature of equipment evolved in America, but now coming largely into use in our own country, its popularity being due to the fact that the cabinet brings a great number of things all within handy reach and close to the place where they have to be used: so avoiding the constant walking about which occurs when things that we wanted in one place are kept in another. There are many varieties of these cabinets, but they bear a strong family likeness to one another, and the cabinet shown by the accompanying illustration (Fig. 18) may be taken as thoroughly representative of its class. It is actually an American one called the "Dutch Kitchenette." Others like it include the Sellers, the Hoosier and the Hoover.

The kitchen cabinet is intended especially for the housewife who has limited domestic help, and in a still greater degree for the woman who has to do all the work herself. It will be seen to consist of a compact arrangement of cupboards and shelves, together with a working table top and special accommodation for numerous kitchen utensils and stores. Let us look at this American one in detail. It is made of hardwood varnished, and when shut up has the appearance of a quite presentable piece of furniture. It is not more than 6 ft. high, so that a woman can easily reach the upper shelves, and the bottom does not go down to the ground, so that the floor surface underneath it can be kept sweet and clean. To further facilitate this, the cabinet is mounted on castors. The front is free from mouldings, angles being rounded off, and as little lodgment as possible given for dust and dirt.

Turning to the upper part, we find it divided into three sections, all finished in white enamel on wood and metal. On the left is a tall cupboard containing a flour hopper, of tin, with a glass panel at the front to show at a glance how much flour is in hand, and with a conical mouth at the bottom, fitted with a sieve, through which as much flour as desired is released by turning the little handle. The hopper is easily removable, but there is no necessity to take it out when refilling, as it turns forward on a pivot and there is a lid at the back through which the flour bags are emptied. Judging by the size of the hopper, it would seem that

FIG. 18.—AN AMERICAN KITCHEN CABINET.

ng other features are the flour bin with glass indicator panel and hopper release; ugar jar, on swinging bracket; the pull-out enamelled table-top; and an arrange- t for the bottom cupboard which brings the shelves forward, within convenient reach, as the doors are opened.

Americans must keep larger stocks of flour than is customary here in the average household, though there would not be too much storage space in the hopper if bread were made at home.

On the inside of this left-hand cupboard is a printed list of various weights and measures, recipes, and other information to which reference is often needed, and there is also a most useful indicator for household stores. It consists of a list of the various articles—salt, pepper, spice, soda, etc.—printed in clear type on either side, and against each name is a slide of cardboard, half white and half red. The normal position is for the white portion to be next the name. The housewife wanting to buy fresh stores, and finding that she is "out" of something, runs her eye down the list and, inserting a pencil or other point into a little hole in the slide, pulls out the red portion. Then at a glance she can see what she wants, and has a handy reminder, ready for shopping day.

The right-hand cupboard has shelves for various articles in the upper part, and wire grids below, with wire holders on the inside of the cupboard door.

The middle cupboard is divided into two parts. Above is shelving space for stores; below is a cupboard with glass holders for salt and other things, and, on the right-hand side, a glass sugar jar, mounted in a reversed position on a hinged arm, which allows the jar to be brought forward over the table for greater convenience. The sugar is let out through a device similar to that fitted to the flour bin. This lower portion of the middle section has a slatted front which pushes up and down very ingeniously, the slats disappearing into a slot below the upper shelving.

The table top is a special feature of the cabinet. It is made of white enamelled metal, backed presumably with wood, as it is perfectly flat and rigid. It slides forwards and backwards between guides. When full out, it is wide enough to make pastry or puddings on, or to do similar work; whilst, when pushed in, it serves as a handy ledge for odd articles. Underneath this enamelled table top are two slots, one accommodating a pastry board, the other a chopping board.

The lower portion of the cabinet is given up to a cupboard and drawers, the former having shelves that slide

FIG. 19.—CONSULTING THE INDICATOR.

On the door is a cardboard panel with the list of household stores, and a slide against each. The slide is moved to show red for those things that are running short.

forward, and racks for pans and other cooking utensils. On the right-hand side is a tin-lined drawer with a hinged lid ; this drawer being intended for bread, cake and biscuits.

It will thus be seen that the American kitchen cabinet is an extremely handy contrivance. How far it would be successful in England in the hands of an average servant, seems rather doubtful to me : one is rather inclined to think that untidy traits might reduce it to an unsatisfactory condition. But for the housewife who has to do her own work and takes a pride in keeping everything clean and tidy, it is a most admirable fitment.

The foregoing description relates, as already stated, to a typical kitchen cabinet as made in America. There are, however, two or three English kitchen cabinets now on the market, and some further description of these may be given in conjunction with accompanying illustrations of the "Quicksey" and the "B. & M." (Figs. 20 and 21).

The " Quicksey " cabinet is divided into three portions the top as a cupboard, the centre as storage for flour, sugar, dried fruits, etc., and the bottom as cupboards and drawers. The centre portion has a falling flap lined with porcelain-enamelled steel, which is an excellent surface on which to make pastry. There is a series of eight glass jars for cereals, which are automatically close-sealed by a lidding

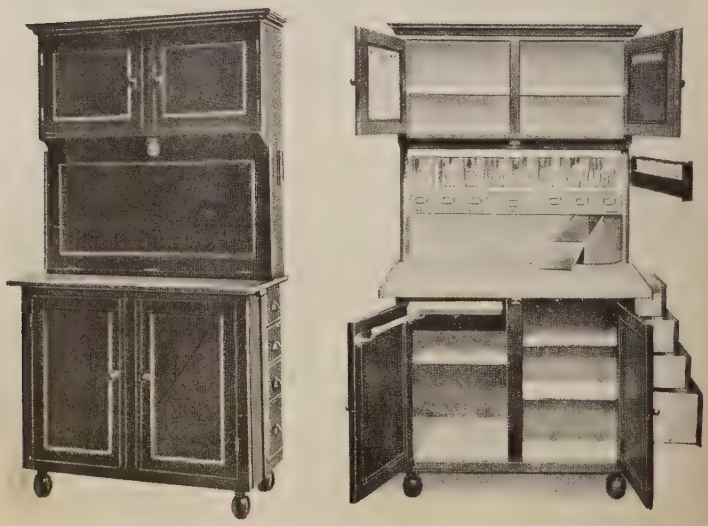


FIG. 20.—THE " QUICKSEY " KITCHEN CABINET.

device when the flap is closed up, and below these jars is a set of small glass drawers for condiments. The flour bin swings out to any angle, and is of a shape that enables the scoop to be used with ease. Of the two lower cupboards, one has a towel rack of aluminium. Above it the chopping board slides into a slot. To the right, at the back, four drawers of different depths are provided, and on this side also is a pull-out recipe slide, hinged to turn at an angle and slotted at the end to take the particular recipe card that is being used. The " Quicksey " is soundly constructed of wood, in various finishes, the most attractive being the " white " model. One pattern also has a tall

glazed cupboard at the top, and there is a diminutive model, called the "Baby," for flats, bungalows and other places where something cheaper and less extensive than the standard model is desired.

The "B. & M." cabinet is constructed of ply-wood, and has several novel features. The upper part, as will be seen from Fig. 21, has curved cupboard fronts, which give increased storage space. When these have been opened the hinged flap can be turned down for use as a table on which to make pastry or to do other similar work. There is ample shelf accommodation for canisters, dishes, etc., with a flour hopper in the centre. Pots and pans are kept in the cupboard below, with lids on the inside of the door, and four drawers are provided on the right; the bottom one being deep and tin-lined—for bread, with another tin-lined drawer above for cakes.

FIG. 21.—THE "B. & M." CABINET.

The Kitchen Floor

In the kitchen it is essential to have a floor surface that can be cleaned with a minimum of labour. The stone floor, with its rectangular flags, has a great tradition behind it, and in an old farmhouse kitchen seems fit for its purpose. But in a modern house it is most unsatisfactory. It is cold to the feet and its uneven surface makes hard labour in keeping it clean. If you have such a floor in your kitchen, cover it with cocoa-nut matting. Foot-marks do not show on this, and although the dust and dirt works through on to the floor, there is no great trouble in taking up the mat-

FIG. 22.—LINOLEUM FLOOR IN BLACK AND WHITE SQUARES. *Excellent for a kitchen.*

ting, shaking it outside, and sweeping the room out before putting the covering down again.

Many kitchens, of course, have boarded floors, and here again it is desirable to have a covering. Boards are even harder to keep clean than stone. They are not impervious, and are very easily soiled. To maintain them in a sanitary condition they must be scrubbed, and scrubbed hard. Linoleum is a thousand times better—is indeed a most admirable floor covering for the kitchen. But, as already emphasized in connection with the hall, beware of printed linoleum. When the pretty tile effect begins to wear off,

FIG. 23.—RED TILE FLOOR WITH WHITE TILED DADO.
Note the rounded angle.

no amount of work will prevent the floor from looking untidy, and the removal of the pattern means the removal of the surface itself. The covering is no longer waterproof; it soon becomes rotten; and in time even the boards beneath it will become rotten too. Inlaid linoleum is best, if a pattern is desired, for the design is not applied; it is part of the material itself, and goes right through from front to back. "Tilo-leum," which gives a red tile effect, or linoleum in black and cream squares, are as good as one could wish for a kitchen floor.

Red and slate-coloured square tiles are frequently used for kitchens and sculleries, but although very clean, tidy, and pleasant in appearance, they are noisy, and add a good deal to the clatter of work. Also to-day they are expensive.

Jointless composition flooring can also be used, but there is no need to give it more than passing mention here, as it has already been dealt with in Chapter III (see page 16).

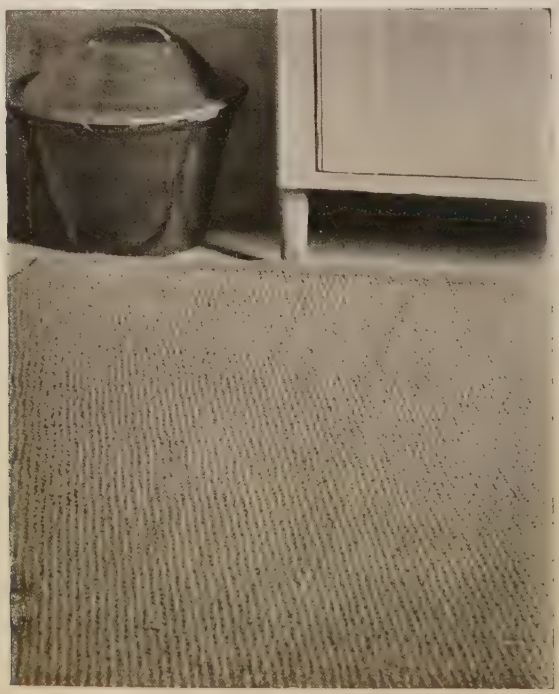


FIG. 24.—COCOA-NUT FIBRE MATTING WILL MAKE A STONE FLOOR COMFORTABLE.

Washing-up Arrangements

There is no daily task so irksome in the house as washing-up. Everything possible should therefore be done to lighten it.

How usual it is to find the scullery sink placed near the back door, simply projecting from a whitewashed wall. Yet this is the most inconvenient arrangement that could be devised. The only good point about it is that the sink is generally beneath a window. But for comfort it is imperative that the sink should be in a much less draughty place than next the door, and it should consist of something better than just a shallow stoneware fitment of small dimensions. It should certainly be a first essential to have the wall at the back of the sink either covered with tiles or zinc. This gives a clean appearance and is altogether much more satisfactory than leaving the wall bare. There is no necessity to have more than one shelf below the sink on either side, and if it is made with slats instead of a single board it is so much the better.

FIG. 25.—A DEEP SINK, WELL LIGHTED, WITH GOOD DRAINING BOARDS ON EITHER SIDE.

As regards the sink itself, this is best of porcelain or glazed earthenware—the former if money will allow, the latter if economy is the prime factor. It should be glazed outside as well as in, in order that it may be possible to keep it clean with a minimum of trouble.

Next in importance to the material of which the sink is made is the depth of it. Architects and builders of the day before yesterday did not seem to realize the importance of this matter of depth, with the result that many sculleries have the legacy of a shallow stoneware sink which causes much splashing over the floor. But now we are all very much more enlightened, and the deep sink is regarded as essential.

Good draining boards on both sides must be insisted upon. Where there is a draining board at one side only, things cannot be conveniently handled when washing up is done; whereas with two draining boards the china or crockery after use on the table can be put on the left-hand side, washed in the sink—either in the sink itself or in a bowl in the sink—and the washed articles put straight on to the right-hand draining board ready for drying.

Draining boards should be the full width of the sink, and a length of 30 ins. on each side will be found very satisfactory.

It is possible to purchase a sink complete with draining boards and stand as a self-contained fitment. One such, the "Staines," is shown on page 56. It is divided into three portions. In the left-hand portion the washing-up is done. The grease overflows into the centre division, and so down into the drain; while on the right-hand side is the cold-water sink, into which the plates and other articles are dipped and then put away in the rack. The swivel taps are handy for cleansing the central division.

Where the best has to be made of an existing arrangement; where, for instance, there is a shallow stoneware sink with a draining board on one side against a whitewashed wall—as so commonly occurs in sculleries; a very great improvement can be effected by fixing a wood frame to the wall high enough to come above the taps, and nailing on to this a thin sheet of zinc in one piece, so that there is a rounded angle against the wall. The zinc should come down right over the board and then be tucked over and nailed to

the underside of the latter. To fit round the taps it will be necessary to make a cut in the piece of zinc at the top in line with the centre of each tap, so that the sheet can be slipped into position ; and to enable the zinc to be nailed securely in place on either side of these cuts, slats of wood should be fixed to the wall at this point before the sheet is put into place. Or, in place of plain zinc, white enamelled sheets (" Tileonite ") can be affixed to the wall with a special adhesive supplied by the makers.

Another important matter is the lighting of the sink. There is no better arrangement than for the sink to be placed against a good-sized window which comes down nearly to the top of the sink, and if the sill is laid with tiles, and the wall face between the top of the sink and the window-sill is also tile-covered, the result will be excellent.

FIG. 26.—MAKING THE MOST OF AN OLD SCULLERY.

Next the sink is a wood casing covered with sheet zinc, which is dressed over the draining board ; a plate-rack (with wood strip against the wall, to prevent chipping) is added : and a table top is fixed under the window with a strip of linoleum as backing.

What every woman wants, however, is a machine that will do the washing-up itself. Many such machines have been devised from time to time, but the difficulties of working them satisfactorily on a small scale in an ordinary house have not yet been fully solved. It has been easy to

Fig. 27.—A "Staines" Sink.

With double compartments, grease overflow, and convenient draining boards and racks.

devise a machine which will wash plates and saucers, and even cups, but the great difficulty has been to design one that will also wash such awkward crockery as vegetable dishes, sauce boats, etc. Satisfactory washing-up by a machine seems to demand also a direct connection with the plumbing services, so that there may be a thorough cleansing with running hot water (and possibly a rinsing with cold). This means a generous supply of hot water,

FIG. 28.—A GOOD ARRANGEMENT IN A HOUSE AT FOUR OAKS, BIRMINGHAM. *Edwin F. Reynolds, Architect.*

The sink itself is well placed, and the facing of the wall at the back of it with glazed bricks is a finish that will maintain itself in perfect condition after long use. Plate, cup and saucer racks are handily to the left, saucepans are kept on a slatted shelf above, and their lids in a holder on the wall to the right, where also a towel-rail is placed conveniently.

which the average house does not possess. Where, however, such a supply does exist, a machine of this type, such as the Premier "Washerup," may be considered. It is virtually a metal cupboard fitted with racks to hold the crockery, which is washed by a series of jets, both upward and downward. Hot water is run through the machine for about three minutes, and the crockery left where it is to dry, which it does rapidly.

Other washing-up machines are designed in the form of a metal tub or cylinder in which the articles are placed in wire holders, the contained hot water being violently agitated by a propeller operated by a lever. Such is the "Whirlpool." There are also washing-up machines electrically operated. One of these is the "Western Electric." It is in the form of a table. In it the crockery is put and the lid then closed down. The touch of a switch sets in motion a motor-driven paddle wheel, which causes a swirl of water in a continuous spray. At the appointed time the dirty water is run off, and clean hot water comes in a renewed spray. This water again is run off and the things are left to dry of their own accord.

FIG. 29.—A SANITARY RECEPTACLE FOR REFUSE.

This is the "Sani-Can," specially contrived for use indoors. It is of white enamelled steel, and the lid (raised by a foot lever) has a holder for disinfectant.

Cleanliness in and around the sink is a first requirement, and everything that tends to this end must be provided. A "Sani-Can" is recommended in this connection. It consists of a white-enamelled can in a metal frame, with a lever at the bottom which raises the lid of the can when the foot is pressed on it. This is an excellent receptacle for vegetable parings, tea leaves and other

sink refuse. The can itself is easily removable, so that its contents may be transferred to the dust-bin ; and its lid has a compartment to take a lump of disinfectant.

Plate Racks

Well-designed racks are a boon in connection with the washing of plates, cups, saucers, and dishes, for they avoid the necessity of much wiping and they greatly facili-

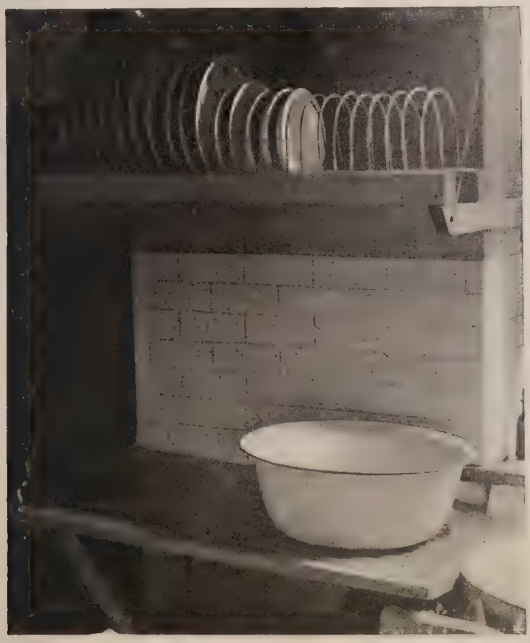


Fig. 30.—A Home-made Plate Rack.
With galvanised wire loops fixed into two wooden strips on brackets.

tate storage. But racks are also of equal service in connection with the cooking stove, especially the gas cooker. Seven different varieties are shown in Figs. 30, 31, 32, and 33. The illustrations are largely self-explanatory, but a few descriptive particulars of each will be useful.

Taking first the racks for attachment to a gas cooker, it is to be noted that the type shown by the top left-hand illustration (Fig. 31) has the rack so arranged that the plates can stand nearly vertical, and in this way each gets uniformly

warm. This rack can be fixed with thumb screws to any make of gas cooker and is supplied complete with white enamelled back plate which prevents the wall becoming splashed with water and fat.

The bottom illustration (Fig. 31) shows another very handy rack for the gas cooker. It is extremely neat in appearance, the fixing by two clamps being so done at the back that the hot plate is not interfered with in any way. This type also includes an enamelled metal back plate. The illustration shows it with a tile pattern, which is very popular, but the plain white surface is preferable.

The top right-hand illustration shows a fitting combining a back plate, a rack, and a hood for a gas cooker. This is clearly a very admirable combination. Such a hood is a most useful fitment, for it gathers and takes away the fumes which otherwise spread about the house, producing that "smell of cooking" which it is very desirable to localize and disperse.

Still another type of rack for attachment to a gas cooker is one that can be moved to five different positions in height, as required.

These four types may be taken as covering most of the requirements, but they do not exhaust the possibilities. There is, for example, another type which takes the form of a hot closet above a gas cooker, heated by the waste heat from the oven.

Turning now to wooden plate racks, the three shown by Figs. 32 and 33 may be studied as good examples serving different purposes. One (Fig. 33) is a wall rack, 24 in. high, 28 in. wide, and 5 in. in depth. It holds 20 plates, 12 cups, and 12 saucers. Another (Fig. 32) is a rack that will hold 18 cups or glasses. Another (Fig. 33) is a rack which is especially handy for use on the draining board next the sink. Plates, etc., that have been washed can be put straight into this rack to dry, and then be carried away where desired without further handling. The rack will take many more plates than here shown—just a few only having been put in to indicate how they are held, one behind the other.

It has long been a common practice to fix a plate rack above one of the draining boards of the sink, and one cannot conceive a better place for it; because, if plates are first

" Richmond " Rack.

" Davis " Rack with Hood.

" Parkinson " Rack and Back Plate.

FIG. 31.—RACKS FOR GAS COOKERS.

washed in hot water, then rinsed in cold—an operation which can be best performed when there is either a double sink or two sinks adjacent, one fitted with a hot-water supply, the other filled with clean cold water—all the trouble of drying can be avoided, as the plates, cups and saucers can be put up at once into their places in the rack and there left to dry of their own accord. Incidentally, in addition to doing away with the time and trouble of wiping, this effects a certain economy in the provision and washing of tea cloths.

Plate racks of this sort are, more often than not, simply fixed against the wall of a scullery, and sometimes it happens

Fig. 32.—A Cup Rack.

that the careless pushing in of the plates causes them to chip. To get rid of all possibility of this happening, a strip of thin rubber about half an inch wide can be nailed to a piece of wood, this being fixed at the back of the plate rack before the latter is attached to the wall. The strip should be placed in the middle of the height, so that it covers just the point where the plates would otherwise touch the wall surface.

An effective rack that can easily be made at home is shown by Fig. 30. It consists of two lengths of wood 2 in. wide and 1 in. thick bored with holes at intervals of $1\frac{1}{8}$ in. to receive loops of stout galvanized iron wire. The rack can be held in place by two wooden arms, or by angle brackets.

This holds twenty plates, twelve cups and twelve saucers.

A portable rack for use when washing-up.

FIG. 33.—"STAINES" WOOD RACKS.

Keeping Pots and Pans

In the old houses kitchen pots and saucepans were always kept on the pot-board which stretched across the bottom of the kitchen dresser, and it is surprising how persistently this unsatisfactory arrangement continues to be adopted in what are called "thoroughly up-to-date" houses. By way of giving it a clean appearance, the practice was to blacklead and polish the pot-board; but the modern housewife, at any rate, soon found what a very poor expedient that was. Black paint, varnished, came to be used instead, and though it was certainly an improvement on the blacklead, which constantly required attention, it was not very much of a step in advance. An alternative method was to have a shelf fixed against the wall, and to keep the pots and pans on this in a line ready to hand. This, indeed, is still a common arrangement, but it has nearly all the faults of a pot-board, although the shelf, being usually placed in the scullery, does not collect as much dust as the pot-board near the kitchen range. The outstanding fault of both shelf and pot-board is, however, that they do not allow air to circulate freely inside the overturned pots (though this can be got over to some extent by nailing a narrow strip of wood

FIG. 34.—A POT-BOARD UNDER THE DRESSER IS A BAD ARRANGEMENT.

FIG. 35.—A SHELF FOR SAUCEPANS IS ALSO UNSATISFACTORY.

about 1 in. thick, along the front of the shelf); and there is also the defect that water, slightly greasy, which may remain in the pots will run down on to the shelf and reduce this to a most undesirable condition. If the shelf is of wood, for instance, a constant use of paper, periodically renewed, is necessary, otherwise the wood itself becomes saturated with fat. Obviously, therefore, there is need for a better arrangement, and this is supplied by the pot-stand. This, as will be seen from the accompanying illustration, is a very simple affair, consisting of nothing more than three legs with strip iron fastened on edge at intervals up the stand. In this way quite a large number of pots can be stored in a very small space; there is no surface on which grease can collect; and, what is most important, air can get freely inside the pots, which therefore always smell sweet when taken down as wanted. Pot-stands of this kind can be purchased in the shops—they cost from 10*s.* to 15*s.* at the present time—but anyone with a small amount of skill can make one for himself. The stand shown is 6 ft. high, the legs being formed of strip iron 1 in. wide and rather less than $\frac{1}{8}$ in. thick. The stages are made with iron ribbon, also about 1 in. wide, holes being drilled in the uprights at intervals of 9 in. and the ribbon riveted in place. On plan the

Fig. 36.—A Pot-Stand.

stand forms a triangle with 10 in. sides at the bottom, tapering to 6 in. at the top. The lower ends of the legs are turned over and have holes for nailing the stand firmly to the floor; while, if additional support is wanted, a staple at the top passing around one of the uprights will make the whole arrangement perfectly secure.

The best place for the stand is in a corner of the scullery, not with one side flat against the wall, but with the apex of the triangle fitting right into the corner, where it can be held by the staple. Of course, if desired, the stand may be made higher than the one here illustrated, but this gives support for eight saucepans or other similar kitchen utensils,

Fig. 37.—An Excellent Method of Keeping Saucepan Lids.

and in an ordinary household that ought to be ample accommodation.

For keeping the lids, all that is necessary is a strip of wood fixed to the wall with a block at each end to give space for the lids to drop through till the handles rest against the wood strip. It is little devices of this sort that add so much to the convenience of the house. In this matter of saucepan lids, for example, what a trouble they are when lying on shelves or when standing up on edge on ledges, from which they have a peculiar facility to drop clattering on to the floor; whereas this simple arrangement of a strip of wood nailed to the wall as shown keeps the lids secure, neatly together, and in such a way that they occupy very little space.

Cooking Stoves.

Cooking stoves are as numerous as the needs they are designed to meet, and there is no single stove that is best in all circumstances: but seeing that in this book we are restricting our survey chiefly to the servantless house, the selection is correspondingly made more definite. With a range, for instance, there is very little occasion to discuss the merits of an open fire, from the point of view of the household where maids are kept. What we have rather to consider is the work which the range entails, its efficiency as a cooking appliance, and perhaps also its value as a means of getting hot water.

Within the limits of these pages it is not possible to review all the many kinds of stoves on the market, but a sufficiently representative series of them may be dealt with. Among small ranges there are such modern types as "The Duchess" and the "Eagle Portable." These, instead of being designed to be set in the familiar kitchen recess, stand out free from the wall, thereby giving greater facilities for carrying out various cooking operations. Ranges of this kind are self-setting; that is to say, they need only a flue connection with the chimney; and in some designs they

Fig. 38.—The "Duchess" Range.

Stove-enamelled body, so that blackleading is avoided. A wipe with a damp cloth keeps it spotless.

are carried down to floor level, so that there can be no accumulation of dust and dirt which is awkward to remove. Also it is possible to have them stove-enamelled, which finish does away with blackleading, a wipe with a damp cloth being all that is necessary to keep the range spotless. "The Duchess" (Fig. 38) is obtainable with this finish. It is designed to burn anthracite, though ordinary coal may be used if desired. An anthracite range, however, has particular merit in the servantless house, inasmuch as it banishes that dirty and disagreeable task -flue cleaning. Moreover, with anthracite it is possible to keep the fire in night and day. Thus there is no coming down in the morning to a cold kitchen and setting about the clearing out of ashes and relighting of the fire. And this boon may be secured at not too exorbitant a price. The "Kooksjoie" (Fig. 39) is a particularly well-known range that burns anthracite, and the makers claim that, despite the high price of anthracite in comparison with ordinary coal (85*s*. as against 45*s*. per ton), their range is quite economical in upkeep. A 36-in. range, sufficient to cook for a family of ordinary size, uses on an average half a ton of anthracite per month, burning continuously, and if properly regulated the fire will keep alight without attention for more than twelve hours. The oven is of ample size, being 17 ins. from back to front, and has a dividing shelf and removable front strip between the doors which enable it to be used either as one large oven 17 in. high or as two smaller ovens. It is therefore, very adaptable to various cooking requirements, while as regards hot-water supply, its boiler, instead of being mysteriously secreted somewhere at the back, is set right in the midst of the fire, thereby ensuring the utmost efficiency. This boiler is connected to a 30 or 40 gallon cylinder and assures a constant and plentiful supply of hot water.

Also designed to burn anthracite is the" Aquaheat" range (Fig. 41). This is of a type by itself. The fire-box is fitted with adjustable legs and around it is set a water-tube boiler, while the oven is placed high up at one side. Perhaps the outstanding feature of this arrangement is that, in addition to cooking and hot-water supply, five or six radiators can be heated. Thus, from one fire in the kitchen, the hall and other parts of the house may be warmed.

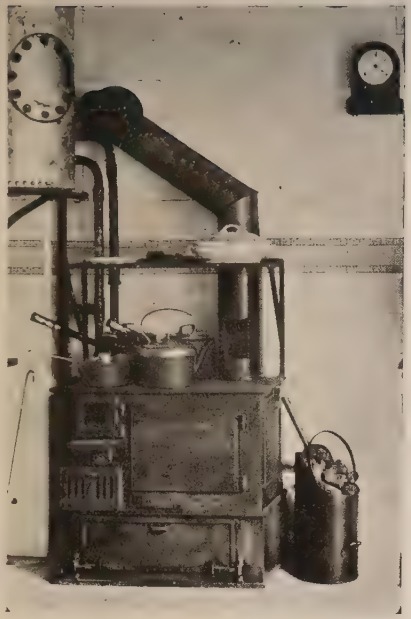


FIG. 39.—THE "KOOKSJOIE" RANGE.
With an anthracite fire that keeps in day and night, meets all cooking needs, and gives a constant supply of hot water.

FIG. 40.—"IDEAL COOKANHEAT" COMBINATION.
This combines an independent boiler with a cooking range, and in addition to hot-water supply it will heat three radiators.

Equally up-to-date and efficient are the Carron ranges, latest in type being the "Stenhouse," which combines the features of a small closed kitchen range with the cheerfulness of an open sitting-room fire. The illustration of the "Stenhouse" (Fig. 42) shows it with the sliding doors closed, as would be the case when the oven was being used, but at other times the doors would be opened to right and left, showing the fire. It is especially suitable for small houses. The

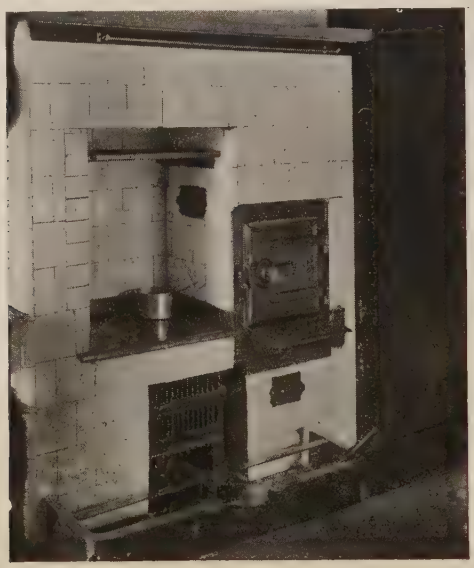


FIG. 41.—THE "AQUAHEAT" RANGE.

With tubular boiler on either side of the fire that will heat five or six radiators as well as providing a good supply of hot water for domestic purposes.

oven is of a good size, being 16 in. by 14 in. by 12¾ in., and the fire-opening below it is no miniature hole, but of such dimensions that it really gives the appearance of a cheery open fire. The height to the top of the boiling hob is 38 in., the width being 36 ins. It is a very convenient arrangement, and pleasing in appearance, having been designed with a sense of the architectural proprieties—so sadly lacking, alas, in most ranges.

The dual features of a cooking stove and a sitting-room fire are combined again in the "Interoven" (Fig. 44), which secures the merits of either by the simple turn of a lever, while, whether open or closed, always the fire is heating a boiler that gives a satisfactory hot-water supply.

Of similar character is the "Servall" grate (Fig. 43), which

FIG. 42.—THE "STENHOUSE" GRATE.

This embraces the essential features of the modern kitchener while securing the comfortable appearance of a sitting-room grate. The oven is above the hob and can have either a fall-down door, as shown, or sliding doors. The fire is covered by another pair of sliding doors, and a high-pressure back boiler is provided.

is made in two sizes, "Minor" and "Major." Its lower part is like an ordinary open firegrate, but has a boiler set vertically at the back, while above is an oven. The arrangement is such that the heat from the fire passes over the face of the boiler and around the oven, the conversion from open fire to enclosed fire being effected by lowering a "fire-cover,"

When cooking needs in the oven have been met, this "fire-cover" is let down and forms a trivet hob in front of the open fire. The whole grate is self-contained, and can be fitted into an ordinary fireplace, and the working and wearing parts are removable from the front without unsetting, and are readily replaceable, being standardized. The flues are easily cleaned, and without removing the oven, which need never be taken out except when the chimney is swept. The oven is 15 in. wide, 12 in. high and 14 in. deep, and has

FIG. 43.—THE "SERVALL" GRATE, AS USED FOR COOKING.

porcelain-enamelled shelves. An additional fitment is a hopper with hinged lid. This can be set over the fire, filled with wet slack, and the fire thus kept in all night, or all day, as desired. The boiler will efficiently heat a 25- or 30-gallon cylinder.

Also to be noted are those combinations—there are several, such as the "Triplex," the "Eagle" and the "Foresight"—which have an open firegrate with an oven and hot-plate on one side of it.

FIG. 44.—AN "INTEROVEN" STOVE FITTED IN A SITTING-ROOM FIREPLACE.

The stove can be used either as an open fire or closed when the oven is needed for cooking; a hot-water boiler being heated continually.

FIG. 45.—THE "EAGLE" COAL-AND-GAS COMBINATION.

With an open coal fire that heats the oven and hot-water boiler, and a gas-heated hot closet for cooking when the fire is not alight.

Then there is the combination of an independent boiler with an oven and hot-plate. The "Ideal Cookanheat" is one such, the "Thermostove" is another. In the "Cookanheat" (Fig. 40) the boiler is so constructed that the fire burns in the very midst of it, the hot water being circulated not only to a storage tank, but also to several radiators, so that the one fire does all the cooking, gives a good hot-water supply, and warms three rooms into the bargain: and the makers claim that it does this with a third the quantity of fuel that would be required for a kitchener and three open fires.

In the "Thermostove" (Fig. 46) the oven is set on top of the boiler, but towards the back, so that there is sufficient

FIG. 46.—A "THERMOSTOVE" INSTALLED IN A KITCHEN RECESS WITH A "SMOOTHTOP" GAS RANGE.

space for a boiling hob at the front. It has a curved front with doors that slide to either side, and there is a hob that can be let down for heating irons, slow boiling, etc. The "Thermostove" is noteworthy for its admirable design, in which respect it makes a great advance on those familiar essays in builders' ironmongery which are generally described as "fancy." This commendation applies with equal truth to the "Osborne" combination grate, which is of the kind that has an oven set at the side of an open fire, but with a

FIG. 47.—THE "OSBORNE" COMBINATION GRATE.
As used when cooking, with the fire enclosed.

hot-plate over both. An important feature of the design is that the oven, which is of sheet steel, can be removed for renewal when required without disturbing the grate. The damper control is very complete, both as regards the main flue and the oven, and there is a boiler at the back of the fire which provides a good supply of hot water. One model is finished in black enamel with white-enamelled plates in oven door and covings.

The above are combinations where coal is the fuel, but there are also combinations of coal and gas. The "Eagle" combination has an open fire with a gas-heated oven for use when the fire is not alight. The "Gascol" is a small,

free-standing range with a hinged frame similar to the " top " of an ordinary gas cooker. Should the fire have gone out, or have got too low, this top can be pulled down and cooking done with the gas rings and griller. Another combination, and a very noteworthy one, is the " Eco." This combines an independent boiler with a gas cooker. The two are set side by side and connected by a flue in such a way that normally the waste heat from the boiler fire, instead of going up the chimney, passes over the top of the oven. By these means it is possible to boil on the

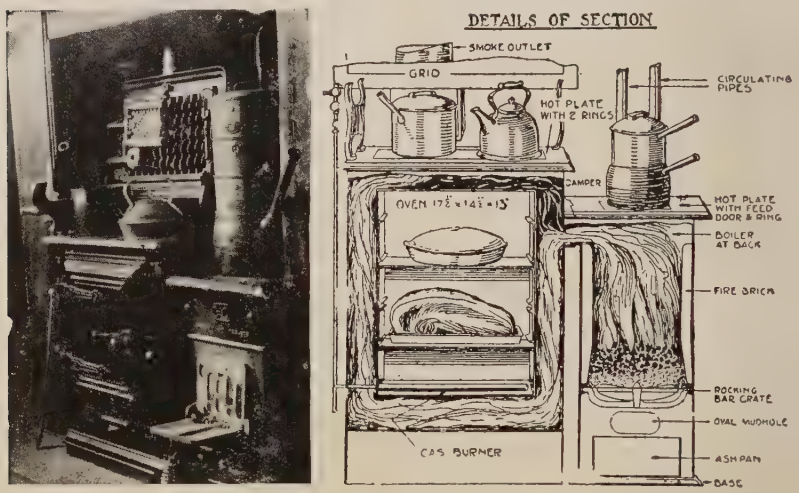


Fig. 48.—The " Eco " Combination.

This consists of an independent boiler for hot-water supply, with gas cooker at the side, the waste heat from the boiler fire being used to heat the oven.

top of the oven as well as over the boiler fire. In this way, too, the oven is kept always hot enough to do certain forms of cooking. But should a hotter oven be desired, one has only to move a damper and the heat then passes right around the oven. There is gas also for supplementary use—in the event, for example, of the boiler fire having been allowed to get low. It is then only necessary to pull down the grid top provided, and a gas grill and boiling rings are available ; and at any time the gas can be lighted in the oven to increase the heat as required. A considerable economy of

FIG. 49.—THE "NEW WORLD" GAS COOKER.

With new type of burners, hot-plate and oven arrangement. At the side is an automatic device that regulates the heat to any desired degree.

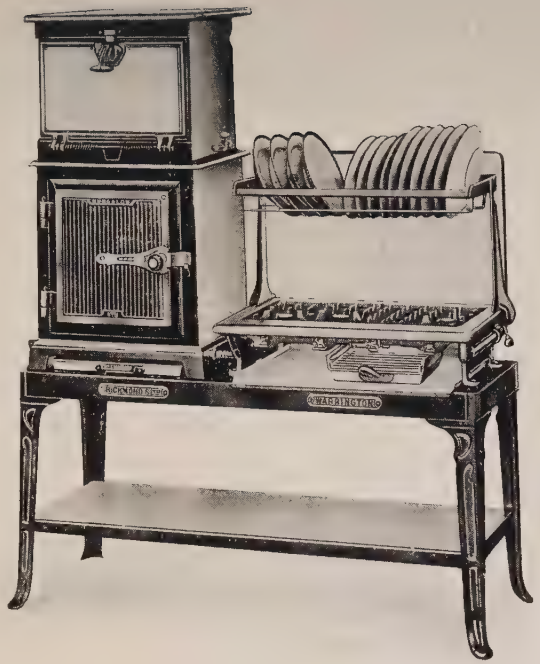


FIG. 50.—THE "BUNGALOW ELEVATED RANGE."

With oven raised to the level of the hot-plate, and with warming chamber above and utensil shelf below.

gas is, of course, effected by the oven being pre-heated by the waste gases from the boiler fire. The main duty of the fire is, however, to heat water, which it does so effectively that in addition to bath and sink supplies, two or three radiators can be heated: at the same time the needs of cooking are adequately and most economically met.

Turning now to gas cooking proper, we have to note the new models. An outstanding feature of these is that the oven is no longer at floor level, but is raised to a convenient height, in some cases on a level with the hot-plate. Another feature is the improvement in the design of the top or grid. Instead of the series of bars which were formerly in general use, there is a ring grid or corresponding arrangement whereby the flames impinge direct on the utensil. A maximum of efficiency is thus obtained, no heat being conducted away, as it is with the old type with bars. There has been, too, a radical alteration in the design of the burners themselves. Thus, in the "New World" cooker, they are so designed that they cannot become choked up; and they give three flame-sizes for boiling, simmering and stewing. The "New World" is the very latest gas cooker and incorporates many improvements. Among other features it has a regulator which automatically controls the heat, so that, after being set, the housewife can turn from her cooking and attend to other matters—a veritable boon in a servantless house.

Attention in recent years has been given also to the externally heated oven. The "Stimex" is a gas cooker of this type. The externally-heated oven has several merits peculiar to itself, not least among these being the steady maintenance of any desired temperature, but in bringing up the oven to the right heat more gas is consumed than with an internally-heated oven. To secure the merits of each a gas cooker was designed by Messrs. Fletcher Russell with an oven that could be internally or externally heated at will, by the depression of a lever by the foot, the aim being to bring the temperature up quickly with internal heating and, having attained the desired temperature, to maintain it by external heating.

Gas cooking apparatus is too extensive to be more than briefly dealt with here. Mention, however—especially in relation to the servantless house—must be made of the

one-ring cookers. Prominent among these is the "Wifesjoie." Cooking, as it does, a whole meal with one burner, and also heating a large cylinder of water, it is designed to meet the demand for a low gas consumption (or it may even be used to burn oil). The oven is automatically ventilated and the heat is maintained at any temperature. Another one-ring cooker is the "National Economy." This has a single burner at the bottom (equal to less than the middle-sized ring on a gas cooker), and with it a joint can be cooked in the oven and three things boiled on the top.

The "Multicooker" and the "Duck" oven are two others that do everything with one burner.

The country cottage without gas supply is not forgotten by manufacturers, and many most useful oil cooking stoves have been introduced. In America, oil stoves are extensively used, and in recent years some good types of them have been brought over to this country and placed on the market. The best-known oil-stove is the "Valor Perfection," one model of which is shown by Fig. 51. These oil stoves have special burners that give a hot blue flame, and are admirable for all sorts of cooking. They are clean, smokeless, and economical. In America, of course, there is a very abundant supply of natural oil, and this fact has been a main reason for the wide use of oil stoves in places where gas was not avail-

FIG. 51.—A TWO-BURNER "VALOR-PERFECTION" OIL STOVE.

This gives a clean hot flame, free from smoke and smell.

able or coal was scarce. But in our own country there is wide opportunity for their adoption. Appreciating these possibilities, English manufacturers have lately made a large development in oil stoves for cooking. Especially to be noted are the stoves with wickless burners, made familiar years ago by the "Primus," which was the first of its kind. The two newest English burners are the "B.P." and the "Supremoil." They give a hot clean flame, and this can be regulated up or down like a gas-burner flame. The "B.P.," moreover, is adaptable for use as a radiator (in which case a copper reflector is fixed around the bur-

FIG. 52.—A "BELLING" ELECTRIC BREAKFAST COOKER.

ner), and for lighting purposes (in which case a mantle is used, giving a very intense light). For cooking purposes these wickless stoves can be used with various types of ovens, which are either fixed or portable.

Considerable attention also is being drawn at present to electric cooking. During the past ten years this has made rapid strides. With a well-designed equipment, it is an ideal method of cooking, adaptable to all needs. Erroneously it is credited with being very expensive, but the fact that electric cooking stoves are now being installed in workmen's dwellings in the North is sufficient to prove how mistaken is this idea, as well as the notion that technical skill is needed in using the stoves.

The future of electric cooking rests, of course, with the

development of cheap current. It has been computed that when current can be obtained at 1½*d.* per unit, electric cooking is well worth while adopting. With current at 1*d.* per unit, it becomes quite economical to use electricity to heat kettles, boil milk, and for a score of subsidiary household requirements. A still further use of it would become economical if current were obtained at ½*d.* per unit (and prior to the war there were more than twenty districts in the kingdom where it could be got at that price), for then it might be used for heating water in bulk for baths and for washing-up purposes. The age of popular electricity may not yet quite have arrived, but it is certainly not far distant.

Last but not least for mention is "hay-box" cookery. This ranges from the simple and inexpensive cooker made by the practical woman at home out of an old box and layers of newspapers, with one or two casseroles as receptacles for food, to the more important "fuel-less" cooker, such as the "British Queen," obtainable either single, or with two cylinders in one casing.

Porridge for breakfast may be put into a fuel-less cooker over-night and will be found to be cooked in the morning. Boiling water placed in it at bedtime keeps hot, and in this way the necessity of rising early to heat water is avoided. By the use of the fuel-less cooker, indeed, not only are time, fuel and nervous energy saved, but there is also an absence of the odour of cooking in the kitchen.

For the home-made one, a strong wooden box, such as a Tate's sugar-box, is all that is needed. It should have a lid securely hinged, and a hasp and staple for fastening the lid. Line the box with several thicknesses of strong paper, then pack with hay. This must be pressed down tightly, so that the heat may not easily escape through it. Other non-conducting materials may be used, such as straw, sawdust, ground cork, wool or scraps of paper, but hay is clean and easily renewable. Make one or more cavities in the hay for the pans to fit into. Then stuff a cushion with hay, making it large enough to cover the top of the inside of the box, and see that the lid will close properly when pans and cushion are in place. The cooker will look quite presentable if it is painted or a loose cretonne cover is made for it.

An Alcove for Meals

Fig. 53 shows a scheme for an alcove which would be particularly convenient in a servantless house. Briefly put, the idea is that there shall be jutting out from the kitchen a very small room or alcove, arranged and fitted as a permanent place for meals—for breakfast in particular. The kitchen would continue its present use as a place where the cooking and kindred work was done, but instead of having to disturb, at meal times, work which had not then been completed, the table in the alcove could be laid, and the meal served there with a minimum of trouble.

Everything is close to hand. Things can be taken straight from the range, and served with the least possible amount of walking to and fro. Dishes, etc., are all within easy reach, and the work of clearing away would be similarly minimized. The suggested alcove could be made quite attractive with bright hangings against a plain wall surface and with two simple settees on either side of a central table—all designed to make the most of a very small space.

With regard to the table, it is of course essential that it shall have legs that do not make getting in and out an awkward task. The case would be met very well by having a single central leg at each end, or a pair of legs close together. The particular treatment adopted would of course be varied to suit each case. It is quite conceivable that in an existing house with a large bay this might be turned into an alcove at no great expense.

Incidentally, at a time when coal economy is such an important matter, it may be noted that this alcove, being warmed from the same fire as the kitchen itself, would effect considerable economy in comparison with two fires, one in the kitchen and one in the dining-room. The scheme is, indeed, one that embraces the purposes of both rooms in the most economical manner possible. It is primarily intended for the servantless house, but as applied to one where a servant was kept it would prove a most pleasant nook for the maid to have her meals in, or to spend leisure time.

FIG. 53.—A SUITABLE TREATMENT FOR THE ALCOVE

Built out from a kitchen, it becomes a haven for the housewife who does her own cooking. With a minimum of trouble she can have a meal here in comfortable surroundings.

CHAPTER VII

THE STAIRCASE

I DISCREDIT altogether the idea of an uncarpeted staircase. It may appear to be very " clean " and " old-fashioned " to have a plain oak staircase, wax polished, but in this present age of hurry we cannot bother to have our steps retarded by polished stairs that will not allow us to go quickly up and down them without risk of accident ; so I say that such a staircase is more or less of an affectation, and it does not meet our real needs. We want a staircase that is pleasant in appearance and that gives us good foothold, and I cannot think there is anything to equal the carpeted staircase, which, very sensibly, we have adopted as our usual arrangement. But often we wish that the architect or the builder had set about his work with some little consideration for those who have to lay a carpet on the stairs. It is the winders that cause the trouble ; they are, indeed, so awkward with a thick carpet that they become more exasperating than anything else in furnishing a house, always excepting the problem of getting linoleum to fit into awkward places.

In view of the fact that in our servantless house it is essential to study every economy in the wear and tear of things, the necessity to take up the stair carpet periodically has to be considered. If the reader is fortunate in possessing a staircase which goes up in two straight flights with a half-landing between, everything will be as easy as it is possible to be. But, whether the stairs are of this character or with winders, it is certainly a very good plan to have two lengths of carpet instead of one. This not only facilitates the laying down and taking up of the carpet, but also enables it to be reversed, thus altering the places where the tread comes. If the carpet is in one long piece it makes a very bulky thing to handle, and there are only two variations possible in laying it down afresh ; namely, by the change afforded by putting the bottom end of the carpet at the top ; whereas if

the carpet is divided into two parts, four changes are possible, and each part is much lighter to take out of doors in order that the dust may be beaten and brushed out of it. The join between the two ends of the carpet is best arranged where a stair-rod comes. One end can be lapped under the other, the end of the upper carpet being on top. If this is so placed that the stair-rod just covers it, no join will be visible, and the carpet will look as though it were all in one piece.

This matter of taking up the carpet on the stairs is a most important one. The secret of getting long life out of a carpet is regularly to remove the dust in it, and in no place about the house is this so necessary as on the stairs seeing that these are used so continuously, and that the wear comes always in the same place (on the front half of the tread). Pads are, of course, essential, but if laid down in the ordinary way are likely to prove very troublesome, by slipping out of position when the carpet is being laid. The trouble, how-

FIG. 54.—A STAIRCASE THAT CAN EASILY BE KEPT CLEAN.

ever, can be got over in a very simple way, by fastening each pad in position with a couple of drawing pins on the inner side, i.e., the side farthest away from the edge of the step. With the pads thus fixed in position, and the carpet divided into two portions, half the difficulty encountered on the staircase will be eliminated.

The colour of the staircase carpet is important in any house, but especially in a servantless one. Beware of plain dark colours (dark blue, for instance), because they show footmarks so readily. Everything considered, there is nothing better than a good string-coloured hair carpet, perhaps with a narrow dark border. This will stand wear and will not show marks; so there will be a minimum of trouble in keeping it clean.

Two other matters connected with the staircase which call for notice are the stair-rods and the inside corners of each step. Admittedly nothing looks so well on a staircase as polished brass stair-rods, but equally it is necessary to admit that these are labour-making. They have to be cleaned regularly, and as on the average staircase there are quite eighteen rods, this means a fair task. In the servantless house the question may well be asked—Is the result worth the trouble? I should say that it is not. Then, what else can be done? There seems to be only one answer: black iron, oxydized, or wooden stair-rods. The last-named are made of polished hardwood, and need but a quick rub to keep them in good appearance.

One could wish that some scheme might be devised to do away with the eyes that hold the stair-rods; not because these in themselves offer any trouble in being kept clean, but because they are so very much in the way when the stairs have to be washed down, as they certainly should be occasionally. If only there were some arrangement of socketed stair-eyes that could be removed in a moment by giving them a turn, the trouble could be got over. But I have never yet come across such a fitting, and there seems nothing for it but to make the best of the common arrangement.

With regard to the corners of the staircase, these can be filled with a metal "cornerette." But the ideal arrangement would be a "riser" formed with a curved angle to the "tread."

Lastly there is the question of the colour of the woodwork, in the case of a painted staircase; because, apart altogether from matters decorative, which we are not concerned with in this book, on the colour depends a good deal whether the staircase is going to mark easily or not. Some people think that a dark staircase is the best; but against this must be put the fact that dust is very noticeable on dark paint. My own view is that a staircase painted white is better, because there is no more trouble actually in keeping white paint clean than there is with paint of any other colour, and dust is less noticeable on a white surface.

FIG. 55.—WHITE-PAINTED STAIRCASE WITH STRING-COLOUR HAIR CARPET AND WOODEN STAIR-RODS.

With a back staircase the best treatment is to stain it dark brown and lay linoleum on it, cutting a piece for each tread and riser and having a ribbed rubber nosing. This nosing has a slight sinking on the top edge, just sufficient to take the thickness of the linoleum, which fits flush, making a neat finish. Such a staircase involves a minimum of work in keeping it clean.

CHAPTER VIII

THE BATHROOM

IF one were planning an ideal bathroom in an ideal servantless house, without restrictions of expenditure, tiling of the walls would be chosen. But tiling at present prices is an expensive item. Six-inch square white tiles with a glazed surface cannot be bought for less than 6*d*. each, so, without counting fixing, the tiles alone for a bathroom, say, 9 ft. by 6 ft. would cost more than £18. Moreover, we are chiefly concerned in this book with a house held on a tenancy, and no one is likely to go to the expense of permanent decoration as a present for the landlord. At the same time we have to face the fact of constant work being necessitated because the treatment of our rooms is not what it might be.

For the bathroom walls there is a choice of four surfaces other than tiles. We can distemper the walls; we can paint them; we can paper them; or we can stick on white-enamelled zinc sheeting. Distemper is quite satisfactory when it is a washable distemper, but "flat wall finish," which is a modern variety of paint that has a matt surface, is, I think, to be preferred for the bathroom. There are several varieties of "flat wall finish," among them being "Matone." These paints are not expensive. Half a gallon would be ample for two coats on the walls of a bathroom of average size. Steam, of course, from the bath condenses all over the walls, and it is on that account so desirable that the surface shall be an impervious one and capable of being easily kept clean. But it is around the bath itself that marks are chiefly likely to occur, from splashing, and even with a painted wall it is worth while to have some sort of treatment, if not with tiles, at least with "Emdeca" or "Tileonite," which are zinc sheets finished with a glazed tile surface. These sheets are merely stuck to the wall with a special paste supplied by the makers, and finished at the

top with a small beading. Such a treatment around the bath is very attractive, and reduces the housework by enabling the surroundings to be kept clean with a minimum of trouble.

As regards the bath itself, there is nothing to be said other than to recommend one with a hard porcelain-enamelled surface, such as is now generally produced by manufacturers of sanitary appliances.

While referring to the bathroom, I may take up the question of taps; the following remarks applying equally to the rest of the taps about the house. Here, once more, we are up against a much-discussed problem. In the majority of cases, taps in the bathroom and elsewhere are of

Fig. 56.—A Small Bathroom Conveniently Appointed.

polished brass. It is of course possible to have them with a nickel surface, and then the trouble of cleaning is reduced to a great extent. But I will take it that the reader finds himself, or herself, with the ordinary brass taps. Now, any housewife who takes a pride in having everything about her house clean and sweet and well kept will not countenance the idea of leaving bath taps to look after themselves. They start life quite presentably with a nice bright lacquer surface, but the frequent handling of them soon wears the lacquer off and this also gets tarnished, so that it is not long before the once bright-looking tap has a rather disreputable appearance. Polishing, as a consequence, follows. And the trouble is that this polishing has to be done so often, especially during the winter months, when all polished metalwork gets dirty and grimy ten times quicker than it does during the summer. If there were only one tap in the house it would be well worth while to keep it thoroughly polished, even in a house where there was no servant; but in the average house there are probably half a dozen brass taps in one place and another, and the work of constantly having to polish them becomes irksome. This is the whole trouble with "the brights"; there are such a lot of them in the house, and the housewife without a servant has not time to spend in keeping them all in a polished condition, as the sailor keeps his brasswork on a smart ship.

One means of eliminating cleaning is to paint the taps with japan black, or "Flinto," as already recommended in connection with the furniture of the front door. The following is the method: First thoroughly scrub the tap with hot soap and water, so removing all grease and dirt. Next rub it over with a dry cloth, being sure that every particle of moisture is removed. To ensure this, and also to enable the paint to be applied more evenly, heat the tap with a spirit lamp or by burning a piece of paper under it (roll up a piece of newspaper in the form of a small torch and let the flame play on the under side of the tap; it needs to be no hotter than can comfortably be borne by the hand). Again rub it over with a cloth so as to remove any deposit, then apply the paint with a small brush. Put it on in a thin coat; it will soon dry, as the solvent in it is a spirit; it will be quite hard, in fact, in about half an hour. Then give the tap a second coat, being careful to

use the brush in broad flat strokes, and avoiding streaks, which would produce an unsightly finish. We now have a brass tap with a black enamel-like surface (or, if preferred, a transparent enamel, such as "Silicon," "Necolustre" or "Tao-Ti" can be used). With taps that are constantly

FIG. 57.—A PEDESTAL LAVATORY BASIN FITTED WITH NICKEL-PLATED TAPS.

Note enclosed bath on left. This prevents accumulation of dirt underneath.

used, like those in the scullery, the surface of course wears off after a time, and gets marked by kettles and jugs, but it certainly ought to last a couple of months. The chief wear will be on the handle of the tap, but even when a renewal is necessary it is a very simple matter to apply another coat, which will make the tap good for a further period.

But, obviously, this air-dried enamel surface is nothing like so lasting as one that has been "stoved." Taps treated in the latter way are of two kinds—those with a metallic enamel surface and those which are porcelain-enamelled. Both require but a wipe with a cloth to keep them clean

FIG. 58.—WHITE METALLIC-ENAMELLED TAPS FITTED TO LAVATORY BASIN.

and so entirely eliminate the work of polishing. Taps with the metallic enamel surface (which is "stoved" in much the same way as a bicycle frame is) are quite good for lavatory basins and for baths where they receive fair treatment, but hardly to be recommended for sinks or other places where they are likely to be knocked. To some extent also they are affected by very hot water.

A far more permanent surface, and one that will withstand hard use, is given by porcelain enamel. This, however, has to be fired at a temperature which would melt brass; only cast iron will stand it. These taps therefore, or rather the surrounding jacket to the "valve" and the projecting "bib," are made of cast iron, which is porcelain-enamelled

in the same way as a cast-iron bath. Such taps are adaptable to sinks, lavatory basins or baths, and in connection with baths one may have a cast-iron soap tray finished in a similar manner.

The very latest development is a real china tap (Doulton's). The " valve " portion of it is of brass, but the whole of this is covered by a casing of laboratory porcelain, perfectly smooth, and glazed both inside and out, with a china cap to the spindle. The makers claim for these taps that they will withstand hard use. They are, of course, as easy to keep clean as a china cup, while they possess the merit over the

Fig. 59.—Porcelain-enamelled Bath Taps and Soap Tray.

taps with the cast iron jackets of being more slender and graceful in form.

Black taps are sometimes asked for, but there is a misunderstanding as to exactly what such taps may be. There is no such thing as a tap of black metal. Taps of this kind which one sees are either of brass oxidized (which treatment gives only a mere film that easily wears off) or they are of brass which is finished with a black enamel in the same way as the white metallic enamel already referred to. An enamel of any colour may thus be applied. Black " composition " taps, having a casing of some material of the nature of ebonite, might also possibly be used, but, so far as I know, they are not yet obtainable.

As regards the material for covering the floor of the bathroom, cork linoleum is excellent. It is just as easy to keep clean as ordinary linoleum, and is warm to the feet, whereas the latter is not. Rubber flooring is also recommended.

There should be very little in the way of furniture in a bathroom. A small table is handy, and of course there will be a chair, and a mirror in a good light ; but shelving, unless of glass, is undesirable, and for holding the various articles of the toilet there is nothing better than the hygienic fitting shown below ; this can be obtained in three sizes, with two, three and four dishes, each of which is instantly removable from the metal clips that hold it.

FIG. 60.—WILMOT'S HYGIENIC BATHROOM BRACKET.
All of enamelled iron, it consists of two, three or four trays, instantly removable.

CHAPTER IX

THE BEDROOMS

FROM the point of view of daily work in the bedrooms of our servantless house the all-important thing is the floor covering, this having reference not so much to the ordinary walking about in the bedroom as to the daily collection of fluff under the beds, which phenomenon deserves to rank as the eighth wonder of the world. Where all this fluff comes from in twenty-four hours is a mystery; but there it is, and it has to be removed if a bedroom is to be kept in a healthy condition.

I have myself tried the following three bedroom floor coverings—matting, linoleum, and carpet—and my own opinion is that, provided one has a vacuum cleaner in the house, there is nothing to equal a carpet.

Closely woven matting is satisfactory in appearance and pleasant to walk upon with naked feet, and there is not much trouble in brushing or washing it over; but when the time comes to take the matting up it is astonishing to see the quantity of dirt that has gone through it, and remains collected underneath. The fact that it is not seen does not do away with the existence of it, and as we spend a third of our life in the bedroom, there is very good reason to take exception to such a collection of dirt. Moreover, when beds do not stand free, with the head against the wall (the best placing for them), they have to be pulled out when being made every day, and the castors not only mark the matting, but in time cut it through; and then it becomes a nuisance. So, bearing these things in mind, I cannot commend matting for a bedroom floor.

Linoleum is of course admirably hygienic; but polished linoleum is cold to the feet, and the expedient of having runners of carpet over it, with rugs or mats by the beds, is not, in my opinion, a very good one; because these runners and rugs are easily rucked up, and those by the

beds especially have a habit of slipping about, which is annoying, even dangerous, if one happens to jump out of bed without having thought of the balancing feat involved by having a rug on a polished surface. And while speaking of linoleum it is just as well to mention that it is not so palpably easy to keep clean as some people seem to take for granted. Linoleum, to be kept in anything like a presentable condition, has to be occasionally washed over, unless, of course, one is prepared to approve a wax-polished surface, and to run all the risk of slipping, which such a surface inevitably entails.

For reasons of comfort therefore, and because with a vacuum cleaner it can be kept in quite a wholesome condition, I think there is nothing to equal a carpet in the bedroom. It need not be an all-over carpet; in fact it is undesirable that it should be. An oblong or a large square, according to the shape of the room, is everything that can be desired. It can be arranged so that it comes only partly under the beds, and for a surround to it one can have felt, paint, or linoleum. If felt, then let it be a light-coloured felt; some shade of brown for preference, as this does not show marks, and for the same reason again, plus ease of cleaning, I recommend a string-coloured hair carpet, either quite plain or with a thin black line running through it.

As regards the washing arrangements in a bedroom, there is undoubtedly a great change in progress. The washstand with its basin and excessively large ewer or jug is a relic of the times when houses were not supplied with "company's water." When washstands came into being, water was drawn from a well, and a big jug was suitable in the bedroom because it sufficed for several occasions, and so saved many a journey for fresh supplies. But now, if we are continuing with the old arrangement, let us at least have small jugs, holding just enough for one day's use. They mean lightening the labour of whoever has to fill them, and are much easier to handle. Assuming also that we continue with the washstand, then let us have this finished in a way that reduces to a minimum the daily task of putting it in order after use. I have seen very pleasant-looking washstands made from old mahogany tables. But I know also that a polished wood surface for a washstand is one of the most troublesome things you could ever conceive from the

FIG. 61.—A BEDROOM WITH A SQUARE OF PLAIN CARPET, A LARGE RUG, AND STAINED SURROUND.

Fig 62.—A Hot-and-Cold Water Fitment enclosed in a Cupboard.

point of view of keeping it clean. All splashes show, and if soap should get on it the surface is bound to be marked. In this respect the marble top is far more commendable. But the whole merit of the washstand can be doubted : in fact the daily work of clearing up in the bedrooms of a house has convinced most people that it is very much simpler to

Fig. 63.—Another Bedroom Fitment with Hot and Cold Water.

wash in the bathroom, where a basin with a supply of water, hot and cold, is to hand. It has indeed become an increasingly popular practice to-day for people to wash in the bathroom. The only drawback to it is (as in the case of the bath itself) that the members of the household are generally all rising about the same time, and there is some

delay in fitting in everyone's turn in the bathroom. To overcome such a difficulty, the washstand in the bedroom can be eliminated altogether, and in its place we can have a fitted lavatory basin. There is nothing at all new in this idea. Such basins have been used in this country for quite twenty years, and for a long time have been common in America. But it is only very rarely that one finds them provided in the average middle-class house. There is a prejudice against them. It is contended that they are undesirable, because they cause unhealthy smells. But those who have had fitted lavatory basins in their bedrooms will, in general, refute this notion. We can, I think, stretch the hygienic argument too far. I, for one, would say that a fitted lavatory basin can be made thoroughly hygienic in a bedroom, and there is no question at all that it is one of the most convenient fitments that can be put into a house. To avoid all possible smell, however, such a fitment can be arranged in a portion of the bedroom that is cross-ventilated, or which has some direct opening to the outside air. The illustration on the preceding page is an example. Here we have a bedroom in an ordinary house in Hammersmith. A door opens out of it on to a small verandah, and at the angle next this verandah the lavatory basin has been fitted, in a recess. It is thus in the bedroom but not actually of it, and the owner of the house, who has slept in this bedroom for very many years, tells me that he has never experienced the slightest discomfort from having the lavatory basin in his room.

Another expedient is to fit the basin inside a large cupboard, with an outside window to it. This is a perfectly satisfactory arrangement.

The only other feature of the bedroom which calls for comment is the fireplace. The great merit of the open fireplace when a fire is burning in it is the ventilation it assures. As already mentioned when considering the question of anthracite stoves, it is not the impurity of the air that matters so much as movement of air—movement, that is, of fresh air coming in and vitiated air going out. With a fire burning in a bedroom excellent ventilation can be secured. A bedroom fireplace, however, is generally empty, and as there is likely to be just as much down-draught as up-draught in an empty fireplace the register can be kept

closed, and there will not then be the soot and dirt falling down the chimney on to the hearth, causing further work. For warming a bedroom without trouble, the gas fire is of course most useful. And in its modern form it is perfectly hygienic.

The great point about securing fresh air in a bedroom is that there shall be cross-ventilation. I recall a bedroom I once slept in, which, though quite a large room and having two good-sized windows on one side of it, never was properly ventilated when the door was closed. The lack of cross-

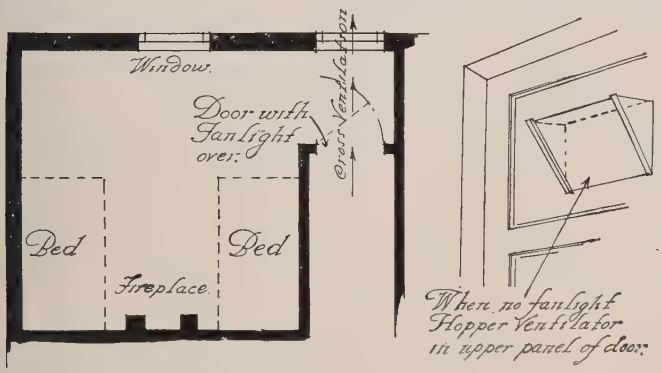


Fig. 64.—Plan of a Bedroom showing Ventilation Arrangement.
This is the plan of a bedroom in an old house. Originally at the end of the passage there was a box-room. This was added to the bedroom space by demolishing the dividing wall. Over the door is a pivoted fanlight, and the cross-draught between this and the window keeps this bedroom always delightfully fresh. Where no fanlight is possible, a hopper ventilator can be contrived in the top panel of a door, as shown by the sketch on the right.

ventilation was the reason for this. I suggest therefore that where it is not possible to have a bedroom door left open, so that a constant current of air between it and the window can be maintained, then a ventilating panel should be formed near the top of the door, with slats arranged like those of a Venetian blind. Or cross-ventilation can be secured by means of a fanlight. In this connection I am reminded of a certain bedroom where the fanlight was a fixture, opposite a window. This bedroom never kept sweet and fresh at night when the door was closed, but the fanlight has now been made to open, and a most excellent result is obtained; the air in the bedroom keeping remarkably fresh all the time.

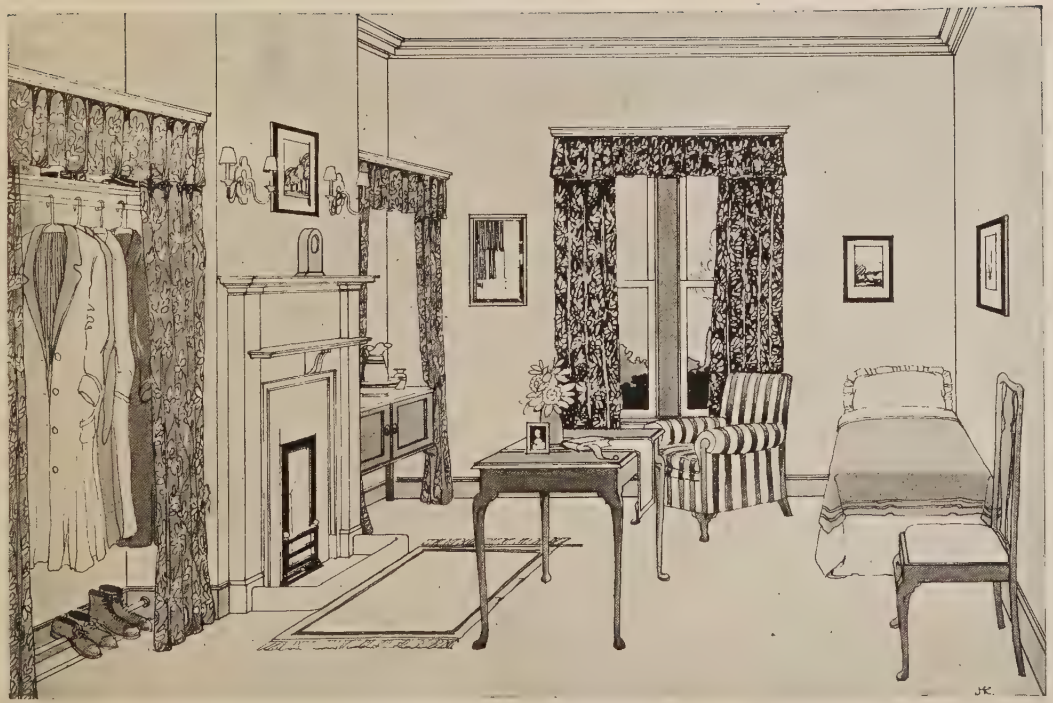


FIG. 65.—A BED-SITTING-ROOM.

With the curtains drawn across the washstand and the clothes recess, and the bed turned into a couch, there is nothing to disturb the daytime role as sitting-room. This illustration has special point at the present time, when so many people have to live in "rooms."

CHAPTER X

LABOUR-SAVING APPLIANCES AND ARRANGEMENTS

Vacuum Cleaners

WITH regard to the various types of vacuum cleaners it must be remarked first that, quite obviously, all the merits cannot be embraced by any particular machine. One cannot have for a very small sum an appliance which embraces every feature of a machine costing perhaps three or four times as much, and it will depend on the circumstances of each case as to which appliance is considered to be within reach and worth the expenditure.

Before, however, going on to deal with the different makes, it is well to emphasize the very great value which vacuum cleaners possess. Though it is true that the bulk of the dust which floats in the air and settles around the room consists of inorganic particles, it is equally true that dust carries disease germs with it, and in every way it is most desirable for health to eliminate dust. The old-fashioned method of dusting, either with a brush or a cloth, did not really remove the dust; it simply disturbed it and allowed it to settle again, so that endless work was being done day after day. The only satisfactory way to deal with dust is to remove it altogether by collecting it in a sealed bag which can be taken away and emptied in the dust bin. This the vacuum cleaner does, and by its use not only can the rooms and passages of the house be kept sweet and clean with a minimum of trouble, but also in the case of carpets and rugs it very greatly adds to their life, for, as already remarked in connection with stair carpets, it is the grinding of dirt into the pile as people walk about that wears a carpet out.

In general it may be said that there are only two classes of apparatus—those worked by hand and those worked by electricity. Most of the hand machines use some form of

bellows for creating the suction, and, in so far as the actual strength of the suction is concerned, it necessarily follows that a large bellows must have a stronger pull than a small bellows. Nevertheless, those cleaners which have small bellows may perfectly well serve the purpose, especially when used regularly on carpets that are reasonably clean to start with.

Of the type operated by movement up and down on a central rod held in the hand, the "Express" and the "Pearl" may be mentioned, the former having a piston action, the latter a cylindrical bellows. They are quite easily worked, clean effectively, and possess the merit of being very light and portable. They can, moreover, be used on a staircase as well as on a floor.

Of the types with large bellows, the "B. V. C.," the "Daisy" and the "Zorst" may be taken as good examples. These are more costly machines, but they are certainly most efficient, and in conjunction with them it is possible to use a number of attachments for cleaning chairs, curtains, walls, etc., thus effecting the complete removal of dust from the whole of the house. In machines of this kind the bellows is mounted within a light metal frame and is operated by a lever. It is quite possible to use the nozzle with one hand and to operate the lever with the other, but it will be found far more convenient for two people to do the work.

Of a class by themselves are the vacuum sweepers. These possess very great merit, inasmuch as they are pushed over the carpet just like an ordinary sweeper. Thus they do their work quickly, and at the same time do it well. Like all other things, they have certain limitations, the very fact that they clean only when the machine is moving meaning that they do not clean right into the corners of a room and are not adaptable to stair cleaning, but the rapidity with which an entire carpet can be run over with them is a very strong point in their favour: their limitations as regards corners at any rate being easily overcome with a brush.

The "Sweeper-Vac" is a well-known example of this class. Fig. 66 shows it. This machine, as its name implies, combines a sweeper with a vacuum cleaner. The sweeper portion is of the usual type, with two brushes operated

by friction wheels on each side, and is detachable as also is the screwed handle of the machine. The vacuum cleaner portion is provided fore and aft, so to speak. At the front is the nozzle and at the back is a ribbed wheel with cranks that work three bellows. The dirt is drawn through the nozzle into an enclosed bag, easily removable by lifting the wire arm that holds the nozzle in position. These bags furnish the incontrovertible evidence of the effectiveness of vacuum cleaning. You may argue away many schemes for domestic hygiene and economy, but you cannot argue away the dirt in the vacuum cleaner's bag.

Another admirable appliance is the "Daisy Sweeper No. 2" (Fig. 67). This, too, works by being pushed over the carpet like an ordinary sweeper. The bellows, a long narrow one, is very ingeniously contrived. Worked from cranks attached to the rubber-covered wheels, it gives a strong pull at the nozzle, through a flexible pipe that adjusts itself to any inequalities of floor surface and delivers the dirt into a bag inside the body. This is a very handy machine, and remarkably low in price.

For those who can afford them, the electric suction cleaners are excellent. They are all constructed on similar lines, consisting of a small motor and fan enclosed in an aluminium case with nozzle attached, a long handle, and a removable bag in which the dust is collected; but there is also a very

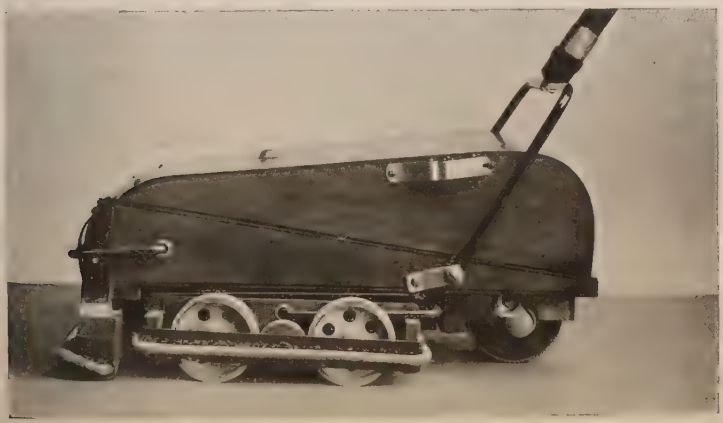
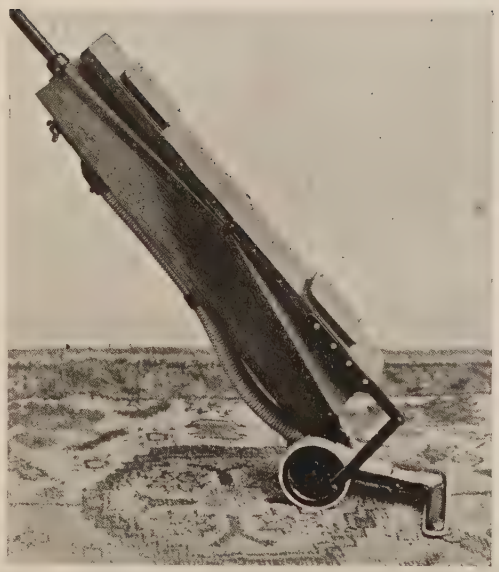


Fig. 66.—The "Sweeper-Vac."

The " B.V.C."



The " Daisy Sweeper, No. 2."

FIG. 67.—BELLOWS MACHINES.

The " Vacuette " (Hand Machine).

The " Apex " (Electric).

FIG. 68.—SUCTION MACHINES.

powerful type, such as the "Econo," of box or cylinder form. The "Apex," the "Hoover," the "Imperial," and the "Croydon" are well-known "handle machines." The first two are American, the second two being English machines. An electric "Daisy Vac" and an electric "Sweeper-Vac" are also made, and there is a "Dainty" electric suction cleaner with the dust-bag enclosed in a metal casing.

One of the outstanding features of the "Apex" is the formation of the nozzle. This has a twin chamber that gives equal suction across the whole width, and the nozzle is of such a shape that it will go under a radiator or similar inaccessible place.

In the "Hoover" machine, in addition to the suction, there is a motor-driven brush, this combination giving the effect of beating the carpet while at the same time drawing the dirt out of it. The aluminium casing is carried on small wheels, the back pair being adjustable in height, so that the mouth of the machine can be brought nearer to or farther away from the floor, as desired. The "Croydon" also has the back castor adjustable to suit the mouth of the nozzle in relation to the carpet, so that it will run just as easily over a thick Turkey pile as on a Brussels carpet.

FIG. 69.—DETAIL OF THE "HOOVER" ELECTRIC SUCTION SWEEPER.

With both these and similar machines, cleaning accessories for curtains, walls, furniture, etc., can be used.

These electric cleaners can be worked off an ordinary electric-lighting system, all that is necessary being to connect them up to a wall-plug by a flexible wire—the simplest possible matter; they are then ready for use anywhere about the house. The actual cost of current used depends on whether the house is wired for lighting or for power, and upon the price per unit in the particular district, but as a fair average it may be stated that these electric cleaners cost about 1*d*. or 1½*d*. an hour to run. Their chief merit is, of course, that to all intents and purposes they do the work themselves. You have simply to turn on the switch, the motor at once starts a good suction, and you have then only to pass the nozzle or other attachment over the carpet, chair, hangings, stairs or whatever is desired to be cleaned. They are a positive boon to those who can afford them, and one cannot help thinking that when electric current is produced, as it undoubtedly will be in the time to come, at such a low rate that it can be used very economically for all sorts of domestic purposes, every house will have its electric cleaner.

Similar in appearance to an electric cleaner is the "Vacuette." It really belongs to the vacuum-sweeper class, though different altogether in its mechanism from those already referred to. The suction of the bellows machines is derived from the vacuum they create, the suction of the electric machines being given by the high-speed fan enclosed in the bottom casing. The "Vacuette" also has a fan, but instead of being driven by an electric motor, it is made to "hum" by simply pushing the machine over the carpet like an ordinary sweeper, and it continues for an appreciable time after the machine is arrested. The "Vacuette" thus will take up dust in the corners of a room. The dirt is collected in a long bag similar to those used on electric suction cleaners. The "Vital" is a similar machine.

The periodical emptying of the dust bags attached to vacuum cleaners is, obviously, essential to the proper working of the appliances; but, though obvious, it is frequently overlooked. Equally is it necessary to see that these household machines are kept well oiled, otherwise they cannot be expected to run smoothly and do their work well.

Washing Machines

Though laundry prices are less than they were, they are still sufficiently high to make it a matter of importance for the householder with a moderate income to consider the economy that can be effected by means of a machine that will do the washing at home with a minimum of labour.

Every woman knows that there is no more laborious task than washing clothes. It is a task that takes the whole energy out of the person who has to do it, and in many a case has been the cause of a breakdown in health.

Washing with a machine is of course nothing new. Contrivances worked in conjunction with a mangle were introduced half a century ago, but it is only within recent years that modern improvements have been effected which give us simple and effective machines that will do the work well and economically—"taking the brute labour out of washing."

These machines may be divided into five classes, namely : (1) those which employ some sort of dolly ; (2) tub washers, which rock to and fro ; (3) cylindrical washers ; (4) spray washers ; and (5) washers of vacuum cup type. Each has its advantages, and it would be invidious here to attempt to place them in order of merit ; but some idea of their chief characteristics may well be given.

The dolly type is at once the oldest and the newest Many people will recall those elementary machines in which a dolly was worked inside a tub by the gearing of a mangle. As, however, the motion was continuous in one direction, it was an obvious fault that the clothes got wound round and round in an exasperating manner. The new washers of the dolly type quite overcome this difficulty by having a reciprocating motion ; that is to say, the dolly instead of going round and round goes backwards and forwards in a half-circle, thus not only washing the clothes much better, but also avoiding the tangling of them.

Rocking tub washers call for very few words of explanation, as it will be at once understood how they work ; that is to say, by the clothes being rocked to and fro in a tub operated by a lever or by a wheel and gearing.

The cylindrical washers have a wooden or galvanized iron cylinder mounted in a horizontal position within

FIG. 70.—THE "RED STAR" HAND WASHER.

FIG. 71.—THE "WHITE CAP" ELECTRIC WASHER.

a tub, and perforated with holes so that the water can pass easily in and out. There is a hinged door in the cylinder through which the clothes are put, and the working of a handle (or the switching on of an electric motor) gives the necessary motion.

Spray washers have a tub with a perforated tube in the centre with a rose top. The hot water is automatically forced up through this at brief intervals and issues in a spray that effectively washes the clothes.

The vacuum cup washers make use of a metal cup something in the form of a large deep saucer; a pair of these cups being mounted on arms within the washing machine. The vacuum cup is also applied to a hand washer, being attached to a handle and used in a tub. The "Challenge" is a washer of this type.

In connection with the washers of dolly type, particular attention is drawn to a machine introduced into this country from Canada, and known as the "Red Star" washer (Fig. 70). This washer has a tub constructed of cypress wood, which is considered the best for the purpose, the tub being mounted on maple legs braced to keep the machine perfectly steady. The whole of the inside of the tub is ribbed, to effect a more thorough washing of the clothes. The lid shuts down steam-tight, thus keeping the water hot all the time, and on the lid is fastened a very effective piece of gearing that operates the dolly within. One special point about this washer is that it can be worked in an easy standing position There is no back bending, an important matter, as all will appreciate who have bent over a washing tub for any length of time. Moreover, the ease with which the machine can be worked is astonishing, this being primarily due to its ball bearings. There is a substantial fly-wheel connected with the gearing, and this keeps the machine running with a minimum of effort. All that one has to do is to move the handle forwards and backwards, and the machine at once starts running. By an ingenious mechanical arrangement, while the flywheel is kept spinning in one direction, the dolly within is operated in two directions, and in this way a very thorough washing of the clothes is effected. It is necessary also to mention the simple arrangement by which the dolly can be lifted before raising the lid; the dolly is thus cleared, avoiding the dragging up of heavy wet clothes and the

possible tearing of them in doing so. Attached to the machine is a wringer with rubber-covered rollers, and also having ball bearings. There is therefore in a very comfortable form everything necessary for carrying out the whole work. The "Red Star" will wash clothes as well as they can be done by hand, in half the time, and with a tenth of the labour. Each batch takes a quarter of an hour.

In connection with tub washers mention may be made of the English machine known as the "Vowel." The makers

FIG. 72.—THE "DARENTA" WASHER.

The tub rests on a frame supported by two chains and can be easily rocked while one sits beside it on a chair. There is no internal mechanism.

state that all sorts of articles—handkerchiefs, curtains, etc.—can be washed in it without any risk of damage; that six shirts, or an equivalent quantity of other linen, according to the size of the machine, can be thoroughly washed in from seven to ten minutes; and that a full day's washing as done in the ordinary way can be finished before noon with the "Vowel" washer.

Among the rocking tub washers is an English machine

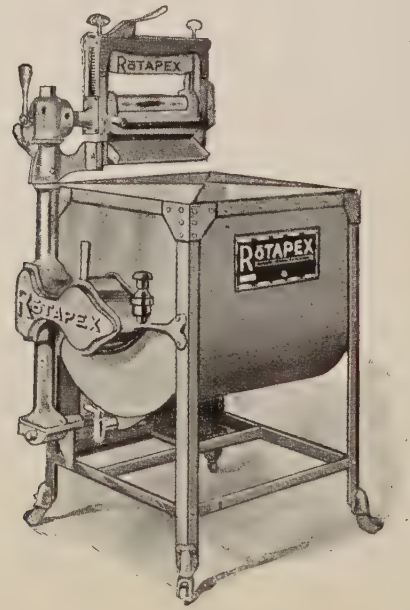


FIG. 73.—THE "ROTAPEX" ELECTRIC WASHER.

called the "Darenta" (Fig. 72). One of the features of it is the absence of any internal mechanism in the tub, which, resting on a frame supported by two chains, can be very easily rocked while one sits beside it on a chair. A swirling motion is imparted to the water, and a tubful of clothes is thus well washed in a very short time.

Having now considered the different types of washing machines, I may go on to give a comparative estimate of what would be the cost to a small household for—

(1) Sending the things to the laundry;
(2) Employing a woman at home to do the washing by hand and also to do the ironing;
(3) Employing a woman at home to do the washing with a machine, and the ironing by hand.

My figures cannot be regarded as exact, but they are approximate enough to enable anyone to decide the matter according to his or her own particular circumstances.

We have to remember that the washing bill is never the same week by week. It varies necessarily with the season of the year and one's own requirements. For instance, many more white things will be required in the summer than in the winter, and one week the charge might be made extra by reason of blankets and curtains being done. (In passing it may be noted that the present laundry price for washing blankets is "from" 1*s.* 6*d.* each.) But, as I say, some average figures are sufficient for the present consideration.

As an example, take the case of a middle-class family consisting of husband, wife, grown-up daughter and one servant. The average laundry charges for this family would amount at present to 30*s.* a week.

Now consider what would be the cost if, instead of the things being sent out to the laundry, the work were done at home. To begin with, though there is a servant in our imaginary house, it is pretty certain she will not undertake to do the washing, and the housewife in this case is not likely to contemplate doing it herself. This means outside help in the form of a washerwoman. Her charge is now 4*s.* for a working day of eight hours. Formerly it was usual to provide her with a meal, but the rate of 4*s.* is now accepted as covering everything; the woman having to provide her own meal, either by going home to her dinner—if she lives near by—or by bringing her dinner with her.

It may be assumed that a woman will take a full day to wash the articles for this household, and another day to iron them. There would be the cost of firing for the copper, and fuel for the range to heat the irons. (The irons might of course be gas-heated, and it is likely that the cost would then be more than with the range, which could be used for cooking for part of the time.) Also there is the cost of soap.

In this way we get the following bill:—

Washing at Home by Hand.

	s.	*d.*
Washerwoman, two days (one washing, one ironing) at 4*s.* a day	8	0
Firing for copper, one day	1	0
Soap	1	0
Firing for heating irons on kitchen range	1	0
Total	11	0

Now take the cost of doing the washing at home with a machine. In this case the work is comparatively light and might reasonably be undertaken by the servant. With such a machine as that shown in Fig. 70 she could get through the whole of her washing by midday, and as a machine like this does not use so much soap as is used in washing by hand a small economy would be effected in this time. The woman would still of course have to come for the other day to do the ironing. In this way we get the following bill :—

Washing at Home with a Machine.

	s.	*d.*
Firing for copper, one day	1	0
Soap	0	8
Washerwoman, one day (ironing)	4	0
Firing for heating irons on kitchen range	1	0
Total	6	8

Now, putting the three costs together we get :—

	£	*s.*	*d.*
Laundry bill	1	10	0
Washing at home by hand	0	11	0
Washing at home with a machine	0	6	8

That is to say it costs more than four times as much to send things to the laundry as it does to do the work at home with a machine. It is quite obvious therefore that the machine will very soon pay for itself. Even in comparison with the cost of employing a woman at home to do the washing by hand in the ordinary way, it effects a saving of 4*s.* 4*d.* a week.

The figures here given show that if a machine costs, say, £8, the initial expense would be worked off in a few months, and the housewife would then have money in hand

FIG. 74.—WRINGING WITH AN ELECTRICALLY-DRIVEN MACHINE.

every week in comparison with what she formerly paid to the washerwoman or the laundry.

There are of course thousands of cases where washing would be done by the housewife herself if she had a suitable machine, because though the work in any form cannot be regarded as light and easy, " the brute labour " is certainly taken out of washing when a machine is used.

This is particularly so with the electric washers and wringers, two examples of which are the " White Cap " (a dolly machine –the electrical brother of the " Red Star ") and the " Rotapex " (an all-metal cylinder machine). These in fact do the work themselves, the clothes being put into them, the motor switched on, and the machine then left to itself. When the batch is washed, another can be put in, and the

first batch passed through the wringer, which is also driven by the electric motor. Thus the labour of washing is to all intents and purposes eliminated.

While referring to this matter of domestic washing I would point out the convenience of hopper tubs like those seen in the illustration on the preceding page. They are installed in every American house, and are largely used in the North of England and in Scotland, but in the South of England they are rarely seen.

Fig. 75.—A Drying Frame Suspended from a Kitchen Ceiling.

Clothes Dryers

Throughout the winter much clothes-drying has to be done indoors, and, in the majority of houses, it means that the drying must be done in the kitchen.

A common arrangement is to have a pair of lines stretched across the room, but the defect of this arrangement is that one has to stand on a chair in order to put the things in place on the line, and the chair has to be moved from point to point across the room.

A much better arrangement is to have a frame hung from the ceiling and supported by cords. A photograph of such a frame in a kitchen is reproduced on the opposite page. It is not lowered and pulled up at one end and then the other, but two cords are attached in the following way, so that the frame can be pulled up or let down evenly from one side only :—

Fig. 76.—The "Acme" Folding Clothes-horse.

The pulley on the right-hand side is a single pulley; the pulley on the left-hand side is a double one. The cord fastened over the right-hand pulley is long enough to come through the left-hand pulley and go down to the point where it is made fast to a cleat on the wall or window frame, while the cord which is attached to the left-hand side of the frame passes over the second wheel in the pulley and is attached to the first cord at a sufficient distance back to allow both cords to run through and let the frame down to about 3 ft. from the ground.

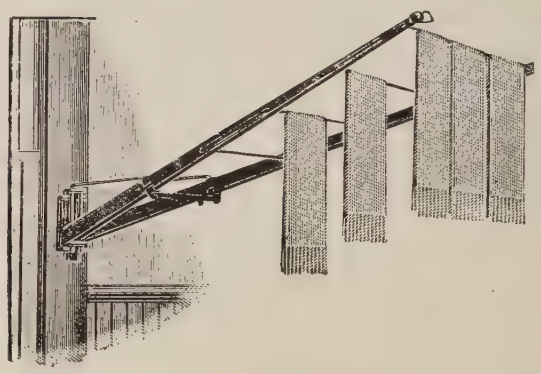


Fig. 77.—An American Bracket Arm.

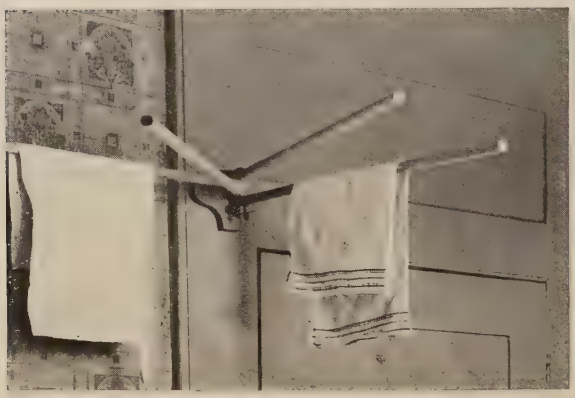


Fig. 78.—Four Rods Clamped together on a Bracket.

With this arrangement obviously there is no trouble at all in putting things in place on the frame and then pulling this up out of the way. It is a device with even more application to airing dried clothes than to drying wet ones, though it can well be used for the latter.

For quite small articles, such as tea-cloths, a V-shaped arm with wires across (Fig. 77) or a set of armsticks mounted on a bracket above the range at one side (Fig. 78) is very

FIG. 79.—THE "BRAYKNAWT" MANGLE.

With rubber-covered rollers and chain gearing on ball bearings that render the mangle very easy to work.

useful. A couple of nails or screws are sufficient to secure the arm-holder in position, and in the case of Fig. 78 a thumb-screw clamps all the arms tightly together. When not in use the arms are folded back against the wall.

For mangling there is a new machine called the "Brayknawt," which is excellent. Fig. 79 shows it. The pressure on the rollers is adjusted from below instead of from above, as in the old type, and this leaves the top clear for getting at the articles after they have passed through the rollers, which are rubber-covered. This mangle is very easy to work, the gearing being finely cut, and mounted on ball-bearings.

Electric and Gas-heated Irons

These have a special virtue in the servantless house, where the housewife has to do the work that formerly was done by her maid. Electric irons can be used in two ways, either heated on an electric table heater and used as free irons,

Fig. 80.—Ironing with a Belling "Dinky" Iron.

or, having the heating element within themselves, they can be used direct: in either case the connection being made by a flex to the wall-plug, or socket holder of a lighting fitting. Thus, they are ready at a moment's notice, and

Fig. 81.—Gas Irons.

there is none of the trouble and waiting associated with making up a kitchen range for ironing.

The gas-heated irons possess a similar advantage. They are connected by a flexible metal tubing to the bracket arm or pendant fitting, and it is always the best arrangement to have a two-way cock, so that the light or the iron may be used at will, or both used at the same time (though generally this dividing of the gas pressure will reduce the effectiveness of the light at any rate).

Another way is to heat the irons with the device shown below. It can be used on a portable gas ring or put over one of the rings of a gas cooker. The triangle of metal in the centre enables three irons to be heated at once. This obviously is an economy, and the arrangement also leaves each iron "free"—i.e., without any tubing attached. A similar appliance is available for use with a "Primus" oil stove.

Fig. 82.—A Fitting for Heating three Irons on a Single Gas Ring.

Labour-saving Mops and Pails

The attachment is adjustable to any bucket.

Wringing out the mop.

FIG. 83.—THE "DO ALL" ATTACHMENT AND MOP.

Among the labour-saving devices introduced in recent years none have been more generally appreciated than the dustless mops, the "O-Cedar" and the "Komo," whether with long handles that save all going down on one's marrow bones (and especially all grovelling after fluff under beds) or with short handles to act as most excellent dusters for ledges and other places. Invaluable too are the new wet mop contrivances. Fig. 83 shows the "Do All" pail and mop, which together make the cleaning of floors a much easier task. The chief trouble with a mop has hitherto been the constant wringing out. In a house it cannot be spun round like a boatman spins a mop, but this device gains the same end. The mop is rinsed in the bucket and is then put into the conical cullender which is fixed over the top; it is given a twist in this to squeeze out all the superfluous water, and

is then ready for use. The mops supplied with the buckets are made from special cotton which is absorbent as a house-flannel, and leaves no objectionable fluff behind. The makers state that, in addition to cleaning linoleum, tiles and other floor surfaces, the mop can be used for freshening up a carpet, with a little ammonia. It is just one of those small things in a house which make the work so much easier.

The "Ronuk" home polisher is another most useful appliance. With it a polished floor can be kept in perfect condition with a minimum of trouble.

Rustless Knives and Knife-Cleaners

There is perhaps nothing more wearisome than knife-cleaning on the old-fashioned board, and when it is remembered that this is a task which has to be done perhaps two or three times a day, the use of one of the new small knife-cleaners is well recommended. Two of them are shown on the next page. They do the work in a third of the time, and with a tenth of the energy. But best of all are the rustless knives, because these eliminate cleaning altogether. Not even acids like vinegar or lemon juice will tarnish them. And as they never need to be cleaned—a wipe with a cloth being sufficient to keep them immaculate—they are worth their weight in gold in a servantless house.

Brooms, Brushes and Boots

In most houses there is generally some spot out of sight, yet quite convenient, where brushes and brooms can be hung up on a series of nails or hooks, for preference next a cellar stairs (if this is reasonably well lighted), but often this provision is not existing. In that event the arrangement of a T-frame is useful. It consists of two lengths of wood with holders for brooms on the cross-piece and hooks for brushes on the long vertical piece.

Boots themselves are rather a problem to deal with satisfactorily. It is surprising what a collection they make, and as they are not very decorative objects the best place for them is in a proper boot cupboard, which must, however, be ventilated. It is essential that boots shall be kept on some arrangement of rails. If they are stored flat on the floor they will take a long time to dry after they have

FIG. 84.—THE "LANSARD" KNIFE CLEANER.
All of steel, and compactly made, this machine will clean knives rapidly and without damaging them (having an internal rest).

FIG. 85.—THE "BESWAY" KNIFE CLEANER.
This cleans along the length of the blade, not across.

got wet, and the leather will be rotted. It is in this respect that the exposed rails have considerable merit, as they allow air to circulate freely round about the boots. On the other hand the exposed boot rack collects dust, and therefore the best arrangement of all is, perhaps, a ventilated boot cupboard.

Cooking Utensils and Devices

In the servantless house especially it is necessary to have cooking utensils that are easily kept clean, and some in which the food can be served straight to table—such as earthenware casseroles and "Pyrex" fireproof glass—and there are now available many devices that save time and trouble in the preparation and cooking of meals. These are too numerous to mention here, but a small selection shown by Figs. 86 to 92 will indicate their usefulness. For pot and pan cleaning, a recurring everyday item of housework, the woven wire scrubbers, in the form of a ball or a glove, are admirable, especially when used with "Vim" or other cleansing powder.

FIG. 86.—THE "MODEL ROASTER" WITH A 3-TIER STEAMER ON A GAS COOKER.

The "Model Roaster" is a portable oven that needs very little heat. Meat, fish, eggs, etc., can be cooked in it. As here seen, a fillet of beef is being cooked in it, while a pudding and vegetables are being done in the two upper compartments of the steamer.

FIG. 87.—THE "WELBANK" BOILERETTE.

The working of this most useful device is as follows :— A quart of water is put in the outer vessel, and the meat, chicken, or whatever is to be cooked, is put in the inner vessel, with vegetables in the wire basket above. A cupful of water is added, and the lid is then put on. When the steam issues from the brass safety valve seen in the upper view here given, the boilerette is removed to a greatly reduced source of heat—just the smallest burner on a gas cooker, slightly turned up—and left alone for an hour and a half or two hours. The boilerette "does the rest." The housewife can go out, and at the end of the prescribed time everything will be found done "to a turn."

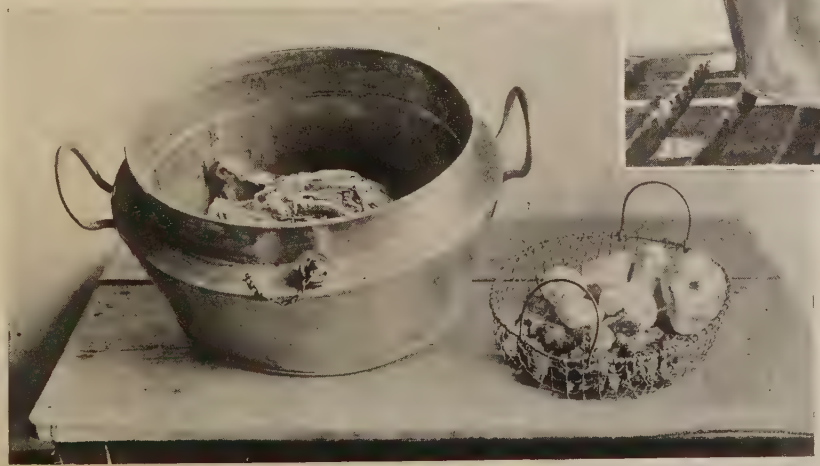


FIG. 88.—THE THIRD HAND.
An ingenious double fork that is most useful when cooking.

FIG. 89.—FRIED POTATOES AND A NOVEL CUTTER FOR THEM.
The cutter is a corrugated piece of tin, and is used just like a knife.

FIG. 90.—SOME "PYREX" FIREPROOF GLASS.
In which things cooked can be served direct to the table.

FIG. 91.—THE "OLIPEL" WATER HEATER.

This is a portable appliance. A jug of cold water is emptied into the top, and immediately the same quantity of scalding

FIG. 92.—THE "THREE-MINUTE" BREAD-MAKER.

A crank inside kneads the dough.

Service Wagons, Serving Hatches, and Food Lifts

In any house the time occupied in laying a table, serving, and clearing away is sufficient to warrant very serious consideration of what can be done with a service wagon, a serving hatch, or a food lift ; and in the servantless house there is the very strongest reason for adopting one or other of these arrangements.

The service wagon is of course the simplest, and its use being self-evident, there is no necessity to do more than refer the reader to the illustrations on the next page. The drawers seen in one wagon are a very handy addition, as knives and other things are conveniently kept in them. And there is much merit in the folding wagon in a house where space is limited.

Turning to the serving hatch, we may note that frequently the kitchen and the dining-room are back to back. Here then is the very place for a serving hatch between them.

The immediate criticism of this arrangement may be that cooking smells would thus easily find their way into the dining-room. But with reasonable care in keeping the hatch door closed, this would not occur to any material extent. To get over any trouble of the kind, however, a special type of hatch can be adopted.

Many sorts of hatches have been devised at one time or another ; but two which may be referred to here are the barrel hatch and the interlocking door hatch. The first consists of a sort of barrel, divided by a central wood partition with shelves against it, and having openings on either side. The barrel is fitted round with a strip of felt which makes a tight joint and so prevents the smell coming through from the kitchen. The manner of serving is simply to put in the dishes on one side and, turning the barrel, to deliver them to the other side. The second arrangement (Fig. 94) consists of what is practically a cupboard extending through the thickness of the wall and having a door on either side so arranged that in the ordinary way it is impossible to open both doors at the same time ; whenever one is open the other is automatically locked, and in this way the smell is prevented from passing from the kitchen to the dining-room.

Heal and Son.

With baize-lined drawers for cutlery.

THE "QUICKSEY" FOLDING SERVICE WAGON.

This shows it in use. When folded it occupies only a very small space.

Gill and Reigate.

A tea wagon.

FIG. 93.—SERVICE WAGONS.

With a hatch can be combined a cupboard above and below, also drawers that occupy the full depth and are accessible from either side (see Fig. 95).

Obviously a serving hatch saves a very great deal of walking from one room to the other. It is worth while making this improvement with the average type of existing house, but a complete re-arrangement of the kitchen and scullery would be needed to give the perfect result. Fig. 96 indicates a good arrangement. On the dining-room side of the serving hatch there is a flap table convenient for taking dishes, etc. ; but it is on the other side that the arrangement is most noteworthy. Here we have a kitchen and scullery combined, instead of a separate kitchen and scullery. It will be seen that there is a shelf close under the hatch opening, and continuing round from this shelf is the drianing board of the sink, with another board on the opposite side.

Consider how convenient such an arrangement would be in clearing away a meal. Instead of the plates and other articles being first of all piled on a tray and then carried

Designed by Clough Williams-Ellis.

Fig. 94.—A Serving Hatch with Interlocking Doors that cut off Kitchen Smells.

Fig. 95.—A Vast Improvement on the Out-of-date Kitchen Dresser.

In this kitchen cabinet everything is kept dustless on the shelves behind the leaded glass doors. There is a flour hopper in the centre and a fold-out flap for pastry-making. On the left is the service hatch

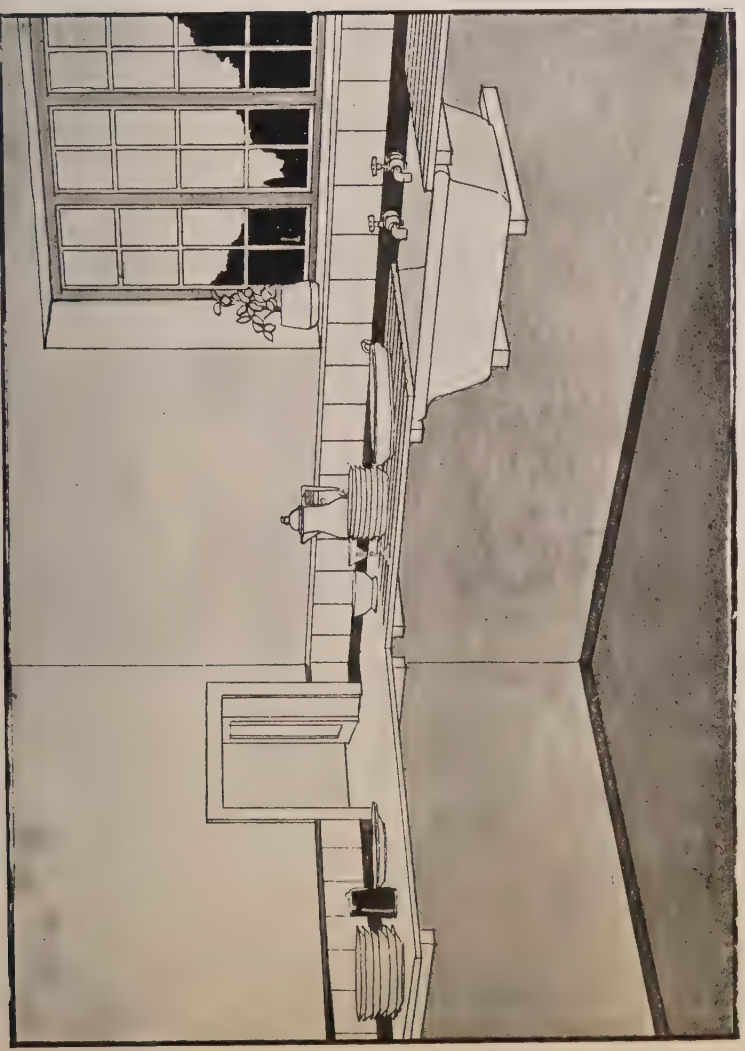


FIG. 96.—A SERVING-HATCH SCHEME: THE KITCHEN-SCULLERY SIDE.

Crockery after use is delivered on the left-hand side of the sink, is washed up, then passes to the right-hand draining board, and from there to the rack or cupboard.

probably along a passage to the scullery, with the likelihood of the journey being repeated at least once, the things could be handed from the table straight through the hatch opening and so on to the receiving shelf in the kitchen-scullery. From there, with a minimum of trouble, they could be put on the left-hand draining board ready to be washed up, and, when this work was done, they would pass on to the right-hand draining board, and so to the plate-rack and china cupboard—which will be in this kitchen-scullery, so that everything may be stored away in the easiest possible manner. Similarly, when laying the table, the china could be passed through the hatch on to the flap table on the dining-room side : the various dishes for the meal following in due course.

Clearly this arrangement would work best when there were two people to attend to it. And this might well be the case even in a household where there was no servant, because one member of the family could hand the things through from the dining-room while another stayed in the kitchen-scullery, removing them on to the draining board.

In a basement house where the kitchen is below the dining-room the scheme shown by Fig. 98 could be adopted, and would eliminate endless journeys up and down stairs. It is worked out as follows : An opening is made in the floor next to the skirting, and the lift comes up through this into a cupboard which, when closed, looks like an ordinary and agreeable piece of furniture. The cupboard is really no more than a wooden front with sides, dummy panels below and two hinged doors above. At the top of the cupboard, on the inside, are two wheels, over each of which a rope passes, being connected to the top of the lift at one end and to counterbalance weights at the other. Hand-holes are exposed when the doors are open, and it simply requires a pull on the rope to bring the lift up from below or to send it down to the kitchen again. The cupboard could easily be secured to the wall by means of blocks and screws, while in the kitchen nothing more would be required than a pair of wooden guides for the lift, and, to make things look neat, a boxing for the rope and counterweights. At the bottom, as the sketch shows, a little service table with shelf would be an additional convenience.

From the dining-room.

From the kitchen.

FIG. 97.—TWO VIEWS SHOWING AN EFFECTIVE ARRANGEMENT OF A SERVICE HATCH AND CUPBOARD.

The cupboard above the hatch is accessible from either side; it has solid doors facing the dining-room and glazed doors to the kitchen. The hatch, when not in use, is covered by a fall-down flap.

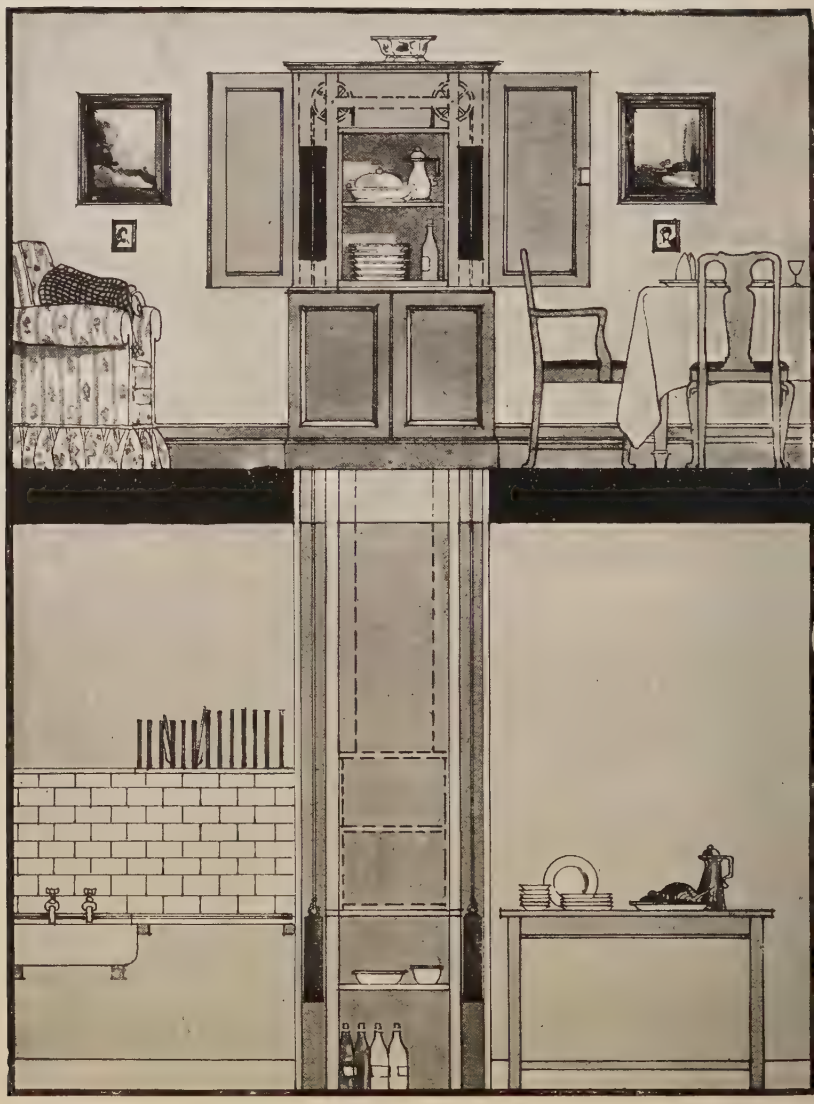


FIG. 98.—AN INEXPENSIVE LIFT THAT REQUIRES NO STRUCTURAL ALTERATION OF ANY CONSEQUENCE.

A small hole is cut in the floor next the skirting and the lift comes up through this into a cupboard, which looks like an ordinary piece of furniture when its doors are closed. The lift is operated by counterweights and ropes.

CHAPTER XI

HOT-WATER SUPPLY

ONE of the essential features in the equipment of the modern house is an economical apparatus for the supply of hot water, not only for baths and washing-up purposes, but also for heating. It is quite impossible here to go into details of the many and various appliances on the market, but some general observations in regard to them may prove useful.

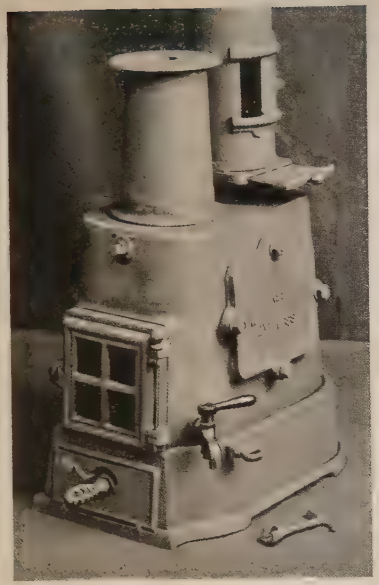
First, it must be recognized that no single system can possibly combine the merits of all. For instance, if the open fire is done away with, and an installation of radiators substituted for it, there is bound to be both gain and loss: gain in the matter of heat efficiency and saving of labour, loss in respect of a glowing fireside. And a similar conclusion will be arrived at when comparing the respective values of different systems. One fact, however, may be taken as final, namely, that the method of obtaining hot water from a mysterious device known as a boot boiler in the kitchen range of yesterday is wholly out-of-date, wasteful in fuel consumption, and unsatisfactory in supply. It is estimated that with a range of this type not more than 10 per cent. of the heat value is obtained from the coal that is burnt. There are, however, modern types of kitchen ranges on the market where the boiler is incorporated in a greatly improved manner, either in the form of what is practically a fireback, or as part of the firegrate itself, and this type of range gives a satisfactory supply of hot water.

On the other hand, not without good show of reason, it may be pointed out that an independent boiler, standing beside the kitchen range or in the scullery, is a most admirable and extremely efficient arrangement. There are on the market many excellent types of independent boilers,

such as the "Ideal," the "Sentry," the "Hydresse," the "Aquita," the "Kalor," the "Beeston." They are designed mainly to burn coke or anthracite, and especially when the latter fuel is used they can be kept going continuously. They are simple to work and to maintain, and provide a sure supply of hot water. Figs. 99 and 100 show some of these boilers. In Fig. 99 the "Ideal Classic" is seen side by side with a Davis "Alpine" gas cooker, taking the place of a kitchener. In Fig. 100 the "Aquita" (with storage cylinder arranged directly on top, and "lagged," or encased, to conserve the heat) is seen standing in the corner of a kitchen, beside the dresser. In the particular household where it is installed the practice is to light the boiler fire every morning, and it is found that a hot bath can be obtained twenty minutes afterwards. The grate is cleaned out and the ashes are removed once a day, and the flues are cleaned (through the little door seen in the wall) once a week. Other independent boilers show results equally satisfactory. They are certainly a very excellent means for getting a good supply of hot water for baths, for washing-up purposes, and also for heating the house.

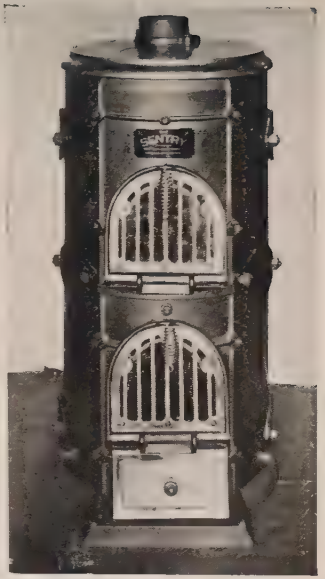
FIG. 99.—AN "IDEAL CLASSIC" BOILER SIDE BY SIDE WITH AN "ALPINE" GAS RANGE IN A SPACE FORMERLY OCCUPIED BY A KITCHENER.

With every apparatus, however, that burns coke or coal there is necessarily a certain amount of attention needed in



The "Hydresse" Boiler.

The "Aquita" Water-heater standing in the corner of a kitchen.



The "Sentry" No. 6, having two boilers operated by one fire, for summer or winter use.

FIG. 100.—THREE INDEPENDENT BOILERS FOR HOT-WATER SUPPLY.

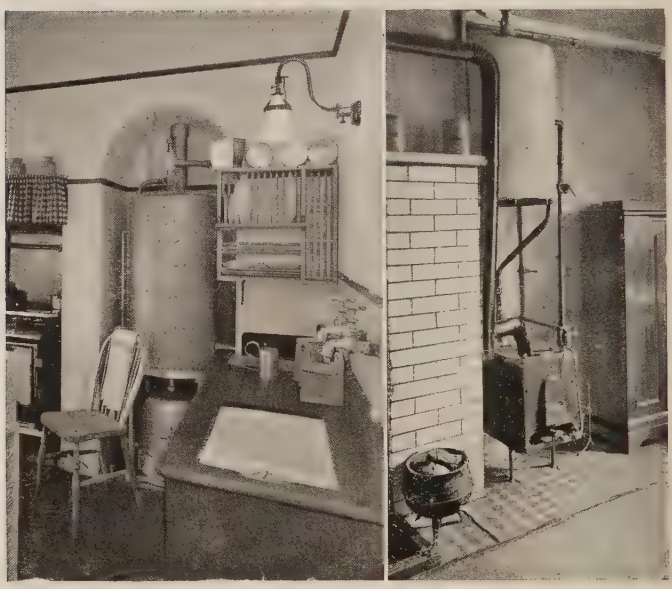


FIG. 101.—TWO GAS-HEATED CIRCULATORS WITH CYLINDERS.

That on the left is known as the "B.T.U. Builder's Set." The other is the "Victor," and in this instance the cylinder is lagged, to conserve the heat in the water.

maintaining the fire, and there is the daily task of clearing the grate and removing the ashes. It is in respect of being free from these tasks that the gas-heated appliances lay special claim to our attention. It will be found that there are many which give an admirable supply of hot water in a rapid and most economical manner. Geysers, of course, have long been in favour and are well known. But the geyser, like every other appliance, has its limitations, and in recent years the gas-heated circulator has been largely developed for supplying a complete hot-water service. Gas-heated circulators of many types can be obtained. They can be used either quite independently of or connected to the range boiler, if there is one; the merit of this arrangement being that the water can either be fully heated by the gas (when, for instance, the kitchen fire is not being used—as frequently happens during the summer), or, if the range boiler is in use but the fire has burnt low, the circulator will heat the water to the desired temperature. Fig. 101 shows

two examples of these gas-heated circulators set at the side of kitchen ranges. In Fig. 102 is seen another arrangement cheaper in running cost. In this case there is a geyser over the bath upstairs and an automatically controlled boiler over the sink in the scullery. The latter is fitted with a thermostat which turns down the gas to a by-pass flame when the desired temperature has been reached, turning it up again when hot water is drawn off.

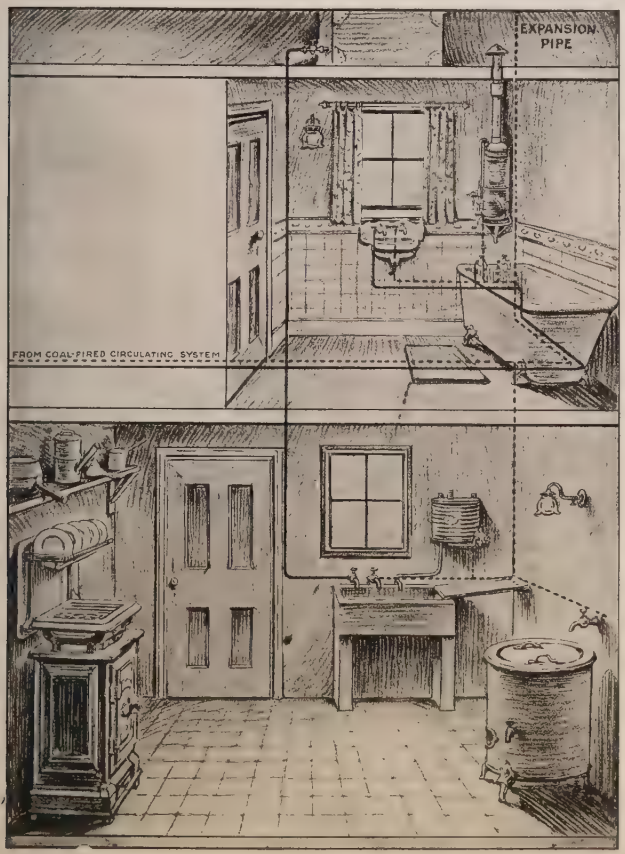


FIG. 102.—ANOTHER WAY TO GET HOT WATER SUPPLY WITH GAS.

With a geyser for the bath and the lavatory basin, a "Lyn" boiler for the sink, and a gas-heated wash-boiler or copper.

FIG. 103.—THE "PARKINSON" COMBINATION.

With gas cooker, gas fire, gas-heated incinerator, water heater ("The New Cottage") and linen cupboard incorporated in a ventilated recess.

Fig. 103 shows an "all gas" combination with the water heater (the "New Cottage") so fitted that, besides furnishing a supply of hot water, it heats a linen cupboard at the side. The "New Cottage" heater is a particularly ingenious device. It comprises what may be described as two boilers, one within the other, a small boiler and a large boiler. The small boiler holds a gallon of water and is no other than an enclosed kettle, while round and about it is the larger boiler containing enough water for a bath. The working of this arrangement is as follows: Ordinarily, when a small quantity of water is required quickly for, say, washing-up purposes, the gas is lighted and the enclosed kettle will

supply a gallon of hot water, at 170 deg. Fahr., in about eight minutes (in five minutes after the first lot of water has been drawn off), the gas consumption being about 8 ft. in the first instance and 5 ft. afterwards. When water for a bath is desired, all that has to be done is to open a valve, when the large boiler is thrown into the system and a hot bath of 20 gallons is ready in thirty minutes with a gas consumption of about 30 ft.; that is to say, with gas at 5*s*. a thousand feet, the cost of getting enough water for washing-up is one-third of a penny, while a hot bath costs 2*d*. (This when starting from quite cold water; if the water is partially heated, as it is when the boiler is connected with the kitchen range or when the "enclosed kettle" has already been in use, the time taken in getting a bathful of hot water may be not more than a quarter of an hour, and the gas consumption correspondingly less.) The apparatus can also be adapted to burn oil instead of gas.

For the washing of clothes gas-heated coppers are in very wide use, especially in the North of England. They save labour and avoid dirt, are low in initial cost, cheap to instal, and economical in maintenance. With one of the usual size (10-gallon capacity) the consumption may be reckoned at about 30 cubic ft. per hour, or, say, 2*d*. an hour with gas at 5*s*. per thousand.

Summarizing the comparative advantages and disadvantages of coal or coke and gas here indicated, we have the following: A kitchen range, if of a thoroughly modern type, will furnish a good supply of hot water for washing-up purposes and for baths, and possibly for heating by means of radiators; and there is only one fire to attend to. On the other hand, when the demands of cooking have also to be met, it is too much to expect any apparatus of this kind to supply every want at the same time. In this respect the independent boiler has special advantages, because the call upon it is for hot water only. But, of course, it means an additional fire to look after, unless cooking is all done by gas. The gas-heated boilers are more expensive to run, but have the merit of doing away with all the trouble of looking after a fire, and hot water can be immediately drawn at any time.

Everyone's decision will be governed by the particular circumstances, but from what has been set forth above the reader will have gained a fair idea as to the various kinds of apparatus that are now obtainable.

CHAPTER XII

THE FINANCIAL SIDE OF THE SERVANTLESS HOUSE

IT is generally assumed that when we speak of a servantless house we mean a house where a servant cannot be afforded and where, consequently, all the work has to be done by the housewife and the members of her household. But there is another aspect of the case, namely, that related to people who, while not well off in the common sense of the term, have enough money to keep a maid, but who prefer not to do so. We are all familiar with examples where a servant has been quite well paid, has had the same sort of food as the rest of the household ; whose comfort has been studied in the way of kitchen and bedroom conveniences, and who has had a reasonably fair amount of leisure and free time ; but, despite all this, she has fallen away from her good beginning, when she did her work well enough, without taking advantage of the considerations she received. This experience, unfortunately only too common, has made many households decide not to keep a servant any longer. As the expression goes, " They are more trouble than they are worth." These pages are not the place to argue out the point, but there is, without question, a very great deal to be said in support of the contention that servants are by no means an unmixed blessing.

This brings us to the main facts : First, that there are thousands of middle-class people who would like to keep a servant, but who cannot afford one at the present rate of wages and cost of living. Secondly, that there are thousands of others who prefer to do without one. Arising out of this state of affairs is the planning and equipment of small houses expressly intended from the very commencement to be run without a servant. In the old days people, while perfectly aware of the time and labour involved in polishing brass,

cleaning stair-rods, sweeping carpets, cleaning windows and many other constant tasks of the house, did not bother themselves very much about these things so long as they had servants to do the work for them; but now with servants unaffordable, unobtainable, or considered undesirable, a keen application of thought has led to the provision and development of all sorts of labour-saving appliances. Possibly if these had been provided in the past the servant problem might not have been so difficult as it is to-day; because the heavy labour and continual work would have been eliminated, and servants would have enjoyed better conditions. But, however this may be, the plain fact is that it is these labour-saving devices in conjunction with a well-arranged plan that can make it possible to work a house successfully and conveniently without a maid. When shown what can be done in this direction, some readers might say that it was all a very pleasant scheme, but that their means would not allow them to entertain it. But I think a very convincing case can be made out for the expenditure.

It may be taken as a general average that you cannot get a good servant to-day for less than £30–£40 a year, and at present prices it will probably cost £1 a week for her keep; also, as she will be using *your* things, not *hers*, quite humanly she will not be so worried about breakages, leaving the gas and the electric light on, and so forth, so that something on this account will need to be added to the total. Thus we get the following:

Servant's wages, say, £35.
Ditto keep at £1 a week, £52.
Breakages, etc., say, £3.
This brings up to £90 a year for a general servant.

Now, put a few figures against this in the way of purchases of labour-saving appliances:

A vacuum cleaner, £4.
Ebony door furniture which requires no cleaning, say, £5.
Stainless knives, say, £5.
Wooden stair rods, say, £3.
Anthracite stove, say, £8.
Gas fires for bedrooms, £5.
Modern floor mops, say, 25*s*.
Service wagon, £5.

All these things only bring us to a total of less than £40, and it must be remembered that whereas a maid is an annual charge, the cost of obtaining these various labour-saving devices is an initial expense only ; so that after, say, the first two years there is but a small proportion of expenditure as compared with what was formerly the case with a servant. To the cost may also be added what is paid for occasional outside help, but there will be a substantial balance—say £50 a year—for use in any way which the household thinks best : more pleasure, more clothes, better holidays, or whatever strikes the fancy.

It is quite obvious that if the attempt is made to run a house without a servant, and nothing is done in the way of altering existing unsatisfactory arrangements, and no use is made of the labour-saving devices that are now obtainable, the result is not likely to be successful.

Even with the best arrangements and all the labour-saving devices that can be got, there will of course be a regular daily routine of work to be got through ; but with good equipment the fatigue can be taken out of the work, and a servantless house may thus become quite easy to run and comfortable to live in.

FIG. 104.—A SLATE ON THE BACK DOOR IS VERY USEFUL FOR THE SERVANTLESS HOUSE.

It saves the housewife many a journey in coming downstairs to give the tradesman his order.

CHAPTER XIII

THE "DAILY-HELP" HOUSE

THE chief aim of this book is to review the various features of equipment and means of arrangement that facilitate the working of a servantless house. The book was written originally at a time when the servant question was particularly acute. It still is a difficult question to solve, and is likely to remain so : but the cessation of many sources of employment for women which came into being with war needs has, admittedly, brought some measure of relief to the householder. This has reference more especially to the available supply of servants. One result of changing conditions is, that where a house had before to be servantless, in many cases to-day a daily-help is made available. It has been considered, therefore, that the inclusion in these pages of some matter concerning the daily-help, and the best ways of making use of her, is likely to be of use.

In "Homes and Gardens" a competition among readers was instituted with the object of presenting what were thought to be good arrangements of work. A large number of schemes were put forward, and a selection from them is given in this chapter as perhaps the best way to represent a very varied outlook.

As in many other aspects of household management, there cannot be, of course, any "best" arrangement, adapted to everyone's needs. Opinions are very divided as to what are considered irksome tasks, and the most conveniently workable scheme is largely determined by the composition of the household itself. But the following three possess points of interest, and should be of service as schemes of work which any individual might adopt in part or in entirety :—

Scheme No. 1

The house under consideration comprises two sitting-rooms, kitchen, small scullery, four bedrooms, bathroom and lavatory. The family consists of four grown-up people, two of whom are out during the day, except for midday dinner at 1 o'clock.

The daily-help arrives at 9 and leaves at 3. She is paid at the rate of 6*d*. per hour. She has had her breakfast before she arrives. At 11 o'clock she stops work for ten minutes to have a cup of tea or cocoa, with bread and butter (or margarine), and potted meat or jam. She has dinner at 1 o'clock.

The work of the house is arranged in the following manner :

The mistress is down at a quarter to seven, and lights the kitchen fire first thing ; she also clears out and lays the sitting-room fire. The dining-room has a gas fire, which is lighted to warm the room for breakfast. When the kitchen fire is going, the kettle is put on, and breakfast is prepared for 8 o'clock. Two members of the family have to be out of the house by 8.40. The two who remain, after clearing the table, make the beds, and by the time that is done the daily-help arrives. The first thing she does every day is to wash up the breakfast dishes and the supper things from the evening before. Her second duty is to clean the front-door step, and then to clean brasses and taps. These duties have to be done every day. After that each day has special duties, which will now be detailed.

On Monday the flannels, handkerchiefs, small white articles, blouses, towels, and kitchen towels are washed at home. While the " help " is doing that, the mistress brushes and dusts the sitting-rooms. Then she rubs over the bedrooms with an O-Cedar mop (the rooms are covered with cork carpet), and brushes the stairs and hall, afterwards dusting them. The other member of the family, who is elderly and cannot do much active work, peels potatoes and makes a pudding. (Cold meat is the order of the day on Monday.) When the washing is finished and the clothes are put out to dry, the " help " cleans up the small scullery and kitchen. The mistress lays the table, and has dinner ready by 1 o'clock, when the other two members of the

family arrive. Dinner over, the " help " washes up, cleans saucepans, fills coal boxes and cleans knives. By this time it is 3 o'clock, and she is ready to leave.

Tea is at 5, and the members of the family clear and wash up after. Supper is a simple meal at 8 o'clock, after which the dishes are put tidily together, ready to be washed in the morning by the " help," together with the breakfast things.

On Tuesday the " help " begins with the ironing, after she has finished the washing-up, the steps and the brasses. This usually takes about an hour and a half, and is cleared out of the way by 11.30 or 11.45. (The clothes have been damped and folded by the mistress while the " help " was doing her first duties.) After that the " help " turns out the largest bedroom, and goes over the floor well with a Ronuk polisher. By the time this is finished and the windows are cleaned, it is dinner time again, and after dinner the same routine is followed each day as on Monday.

On Wednesday morning the sitting-room fire is left by the mistress, and, after the usual first duties have been performed by the " help," she clears out and cleans the grate, which is of the " Carron " type, easily kept in order. She then proceeds to turn out the sitting-room, putting out of the room anything that is easily moved. The ornaments are few but good, and there are no superfluities of any kind. When this is finished she turns out another bedroom, polishing the floor and cleaning the windows as on Tuesday. It is then 1 o'clock, and the same routine as before is followed.

On Thursday the dining-room is turned out, also the remaining bedrooms, which are smaller than the others. This takes up the morning until 1 o'clock.

On Friday morning the kitchen fire is left unlighted, and the " help " cleans the flues and range. This is a good hour's work. When it is finished the bathroom and lavatory are cleaned out, the bath being scrubbed with " Vim," and the lavatory pan with boiling water and soda. The landings and hall are also cleaned. After this the silver is cleaned, and then it is dinner time again, after which everything happens as on other days.

There is a gas cooker in the kitchen, which is used when the fire is not lighted, but as the comfort of the house

depends largely on the supply of hot water, which is heated by the fire, this is lighted regularly during the winter. In the summer, three times a week are considered sufficient, water being heated as required on the gas on other days.

On Saturday there is a general clear-up in preparation for Sunday, on which day the "help" does not come.

It will be seen from the foregoing that all the cooking is done by the mistress. On Thursday morning bread is baked, and on Tuesdays and Fridays such things as scones and cakes. On Saturday a hot dinner is cooked, also Sunday's pudding is made—a hot steamed one, or a cold one, according to the season. Welbank's "Boilerette" is useful on Sundays, as vegetables, etc., can be left in it over a gas burner while the family goes to church. It is also used on days when the family all want to be out in the morning, but that is not often, as the shopping is generally done early in the afternoon. Most of the tradespeople call for orders several times a week.

It is perhaps superfluous to state that the "help" employed in this way is an excellent one, who gets through her work steadily, and in a very clean manner. It has not always been the mistress's luck to have such a good one, and things then do not go so well. But when a good daily-help is obtainable much worry is avoided, as well as much waste. C. E. R.

Scheme No. 2

My household consists of my husband, self, one son (who is a bank clerk), and two school girls. All except myself leave home before 9 a.m., and are home to all meals. Mary, my "help," comes as follows:

Monday, Wednesday and Friday	from	9	a.m.	to	5	p.m.
Tuesday and Thursday	,,	9	,,	,,	2	,,
Alternate Sundays	,,	9	,,	,,	2	,,
,, ,,	,,	8–9	,, and 8.30–9.30			p.m.

Our Mechanical Aids

1. Gas fire in the dining-room.
2. Gas ring in the kitchen for kettles, irons and Boilerette.
3. Gas portable radiator to warm hall and bedrooms when necessary.

4. Gas washing boiler.
5. Steamer with three tiers.
6. Vacuum sweeper with five nozzles—our best friend.
7. Carpet sweeper, for crumbs and odd bits.
8. Mop for linoleums.
9. Stainless knives.
10. Rack for crockery near sink.

Our Old-fashioned Drawbacks

1. An ancient coal range in the kitchen which *must* be used, as there is no other way to heat water.
2. A lot of stairs, as the house is on three levels.
3. Three long passages.
4. No back door, so that the front gets all the traffic.
5. No coal cellar. All coal has to be carried through the house into a box in the yard !
6. No wash-house. We wash in the scullery, which is very awkward, as all dishes must be kept in the kitchen on washing-day.

Our Labour- and Money-saving Ideas

1. Washing.—As this is done at home, excepting sheets, tablecloths, serviettes, shirts and collars, we wear jumpers to save blouses, with dark overalls for work ; coloured cretonne bedspreads and nightdress cases, etc. ; and have no cloth on dining or tea table.
2. Silver.—All superfluous odds and ends are put away. We use glass salt cellars, etc., and when washing the table silver we put a scrap of soda and a pinch of whitening in the water to save polishing.
3. Boots—We clean our own, or use two pairs, so that Mary can clean one set while we wear the other.
4. Dusting.—Every principal room has its own duster hidden in it.
5. Cooking.—Casseroles are a great help to us ; also a hay-box for porridge.

General Daily Work List

MISTRESS

Rise 7.—Light kitchen fire, open windows, have early tea ; cook breakfast.

8.45.—Clear breakfast table, wash breakfast and supper dishes from night before.

9.15–10.30.—Bed-making and dusting; prepare room for turning out.
10.30–11.30.—Arrange dinner; answer front door till now.
11.30–12.30.—Cook dinner, polish silver, do any short messages.
12.45.—Set dinner, room having been swept and dusted.
1–2.—Dinner.
2–2.30.—Clear table, wash silver and glass, arrange tea.
2.30–5.—Free time, Monday, Wednesday, Friday.
5. Arrange next day's work and meals before Mary leaves.
7–7.30.—Supper and clear up, set breakfast, etc.

General Daily Work List

MAID

9–9.30.—Front steps, sweep hall, do drawing-room grate.
9.30–11.30.—Sweeping rooms and stairs, emptying slops, and tidying bathroom.
11.30–1.—Kitchen work, boots, knives, coals, sticks for next morning, polish kettles, etc.; answer front bell from now, supervise and dish dinner.
1.30–2.—Dinner.
2–2.30.—Washing-up, tidying kitchen and scullery and yard.
3.30–5.—Mary is dressed, ready for visitors; brings up tea, leaves supper prepared, kitchen fire laid, and everything possible ready for breakfast next morning.

Special Work on Special Days

General tidy-up; shopping. Tidy and wash-up, 8.30–9.30 p.m.

MISTRESS	MONDAY	MAID
Laundry; baking.		Drawing-room extra.
Visitors' afternoon.		Clothes steeping, if washing week.

TUESDAY

Wash flannels, if not washing-day.	Bathroom and passages.
	Washing-day once a fortnight.

WEDNESDAY

Fine ironing or silver polishing.	Turn out two bedrooms.
	Ironing.

THURSDAY

Kitchen flues at night.	Morning-room and study.

FRIDAY

General tidy-up ; shopping.	Kitchen, scullery and yard.
Arrange week-end meals.	Windows inside.
Out in afternoon.	

SATURDAY

Grocery shopping.	Dining-room and hall, etc.

SUNDAY

Cook alternate mornings.	Tidy and wash-up, 8–9 a.m.
	Tidy and wash-up, 8.30–9.30 p.m.
	Alternate Sundays cook dinner, etc., 9–2.

Time for the inevitable mending and making of clothes is very scarce. Mary and I do what we can to keep tapes, buttons, and stockings in order, but I have a woman for a day once a month to keep us really tidy. This costs 3*s.* and her food, and is worth it.

We go out a good deal and have plenty of visitors. Mary does no waiting at meals : simply changes plates, we and a revolving dumb waiter doing the rest.

In conclusion, I find that one has to overlook many things. Mary is not always up to the mark (neither am I). Time-tables and rules get upset ; accidents must happen ; but if the right spirit exists between mistress and maid, any labour is halved and any worry lessened, and the results are good. Woman's work is truly "never done," but equally true is it that "ilka blade o' grass keps its ain drap o' dew," and the compensations far outweigh the labours !

A. M.

Scheme No. 3

I have a small house with two sitting-rooms and four bedrooms (two bedrooms only in regular use), bathroom, small hall, landing, kitchen, and larder. We are three in family. For some time I have been unable to get a permanent maid, so I have a daily-help from 9 o'clock to 3.30. I pay her

6*d*. per hour for six and a half hours a day. She does not come on Sundays.

I have the early-morning work to do myself, and as the kitchen fire is not lighted until the "help" arrives, I cook the breakfast on a gas stove and have a gas fire in the dining-room. Breakfast is over and the table cleared by 9 o'clock.

The "help's" schedule of work is—

9.—Light the kitchen fire: lay the drawing-room fire.
9.45.—Prepare vegetables for early dinner.
10.—Sweep stairs and hall, front door-step, etc.
10.30.—Clean bathroom taps, wash bath and mop the floor.
11.—Ready to begin the daily cleaning with my "help."

Monday.—Sitting-rooms in turn.
Tuesday.—Clean silver and brasses.
Wednesday.—Clean bathroom.
Thursday.—Bedrooms in turn.
Friday.—Kitchen flues and larder.
Saturday.—Hall and landings.

12.30.—Take over the cooking of early dinner.
1.30.—Dinner.
2.30.—Wash up, tidy kitchen, fill coal boxes.
3.30.—Ready to leave.

I wash the breakfast things myself, after which I do the daily work in the bedrooms, making beds, using the carpet sweeper, O-Cedar mop, and dusting. This I also do in the two sitting-rooms. Two mornings a week I have a room turned out—which I prepare and dust, and assist the "help" with the carpet vacuum cleaner (with this assistance I find she is able to clean the room in the time allowed). To simplify the work, in addition to the vacuum cleaner, carpet sweeper and mop, I have wooden stair-rods, rustless knives, very little white paint, and little brass or silver.

I prepare the sweets and any made-up dish that is required for dinner or supper—the latter being generally cold.

As the "help" does not come on Sunday, she prepares the vegetables and fills up extra coal boxes on Saturday. I have found this arrangement most satisfactory in every way, also a saving in laundry and kitchen gas in the evening.

C. E. S.

A LIST OF PRICES

(JULY, 1923).

BELOW is given a list of prices of various features of equipment mentioned in this book. These prices are not absolute—they are subject to market fluctuations; but they are sufficiently exact to enable an estimate of expenditure to be made. Most of the articles can be obtained from any good ironmonger's or stores, but for the sake of greater convenience the names and addresses of the makers, or of firms supplying such articles, are added.

Page No.	Name of Article.	Price.	From whom obtainable.
12, 90	"Flinto"	1s. tins	The "Flinto" Co., 48, Archer Street, Bayswater, W.11.
16	"Durato" jointless flooring	About 10s. to 12s. per sq. yd.	Durato Asbestos Flooring Co., Union Hall, Union Street, S.E.1.
	"Decolite" do. do.		Bell's United Asbestos Co., Southwark Street, S.E.1.
	"Dolomont" do. do.		British Dolomont Co., 167, Strand, W.C.2.
22	"Omega" anthracite stove	£5 16s. 3d.	Carron Co., 50, Berners Street, W.1.
23	"Esse" anthracite stoves	From £4 9s.	Smith and Wellstood, 11, Ludgate Circus, E.C.4.
25	"Warmall" grate	£8	Coalbrookdale Co., 1, Berners Street, W.1.
25	"Unique" stove	£11 5s.	Pither's Radiant Stoves, Radiant House, Mortimer Street, W.1.
25	"Florence" boiler grate	£12 7s. 6d.	London Warming Co., 20, Newman Street, W.
27	"Bewty" barless fire	£1 5s.	Interoven Stove Co., 156, Charing Cross Road, W.C.2.
34	Coppered-iron grate ("Bush Fire")		Nautilus Fire Co., 60, Oxford Street, W.1.
44	"Hoosier" kitchen cabinet		Louis Matthews, Hoosier House, Preston Street, Liverpool.
48	"Quicksey" kitchen cabinet	£21 10s.	Quicksey Cabinet Manufacturing Co., Cromwell House, Fulwood Place, High Holborn, W.C.
48	"B. & M." kitchen cabinet	£15	Kitchenettes, Ltd., Duck Mill Lane, Bedford; and 36, Furnival Street, W.C.
52	"Tilo-leum"	7s. 9d. per sq. yd.	Liberty & Co., Regent Street, W.1.
54	"Staines" sink	£32 complete.	Staines Kitchen Equipment Co., 94 and 131, Victoria Street, S.W.1.
58	"Whirlpool" washing-up machine	£5 5s.	Duncan, Watson & Co., 62, Berners Street, W.
58	"Western Electric" Dishwashing Machine	£36	Western Electric Co., Ltd., Connaught House, Aldwych, W.C.2.
58	"Sani-Can"		Harrods, Brompton Road, S.W.
58	Premier "Washerup"	£8 8s.	Premier Washer-up, Ltd., 225, Oxford Street, W.1.
61	Richmond "Universal" plate rack	£1 2s. 6d.	Richmond Gas Stove and Meter Co., 164–172, Queen Victoria Street, E.C.4.
	"Davis" do. do.		Davis Gas Stove Co., 60, Oxford St., W.1.
	"Parkinson" do. do.	£1	Parkinson Stove Co., Stetchford, Birmingham; and 129, High Holborn, London, W.C.1.
62, 63	"Staines" wooden plate rack	13s. 6d. to 32s. 6d.	Staines Kitchen Equipment Co., 94 and 131, Victoria Street, S.W.1.
67	"Duchess" range	from £12 12s. stove-enamelled	Smith and Wellstood, 11, Ludgate Circus, E.C.4.
67	"Eagle" portable range	From £11 9s.	Eagle Range and Grate Co., 127, Regent Street, W.1.
68	"Aquaheat" range		The "Aquaheat" Co., Farnham Road, Guildford.
68	"Kooksjoie" range	From £13 10s.	London Warming Co., 20, Newman Street, Oxford Street, W.1.
71	"Stenhouse" grate	£14 10s.	Carron Co., Carron, and, 50, Berners Street, W.1.
72	"Triplex" grate	From £11 10s.	Triplex Foundry, Ltd., Great Bridge, Staffs.
72	"Interoven" stove	£12 5s.	Interoven Stove Co., 156, Charing Cross Road, W.C.2.

Page No.	Name of Article.	Price.	From whom obtainable.
72	"Servall" grate	From £8 18s. 6d.	Coalbrookdale Co., 1, Berners Street, W.1.
72	"Foresight" combination range	From £15	Samuel Smith & Sons, Beehive Foundry, Smethwick, Birmingham.
73	"Eagle" coal-and-gas combination grate	£20	Eagle Range and Grate Co., Aston, Birmingham; and 127, Regent Street, W.1.
74	"Thermostove"	£15 17s. 6d. carr. pd.	Hartley & Sugden, Halifax.
74	"Smoothtop" gas range . .	£18 18s.	Lawson Manufacturing Co., 323, Caledonian Road, N.1.
74	"Ideal Cookanheat" . . .	£16 10s.	National Radiator Co., Hull, and 439, Oxford Street, W.1.
74	"Gascol" range	£8 5s.	Davis Gas Stove Co., 60, Oxford St., W.1.
75	"Osborne" combination grate	£18 8s.	Falkirk Iron Co., Craven House, Kingsway, W.C.2.
76	"Eco" combination . . .	£25	Robert Jenkins & Co., Rotherham.
77	"New World" gas cooker .	£16 10s.	Radiation, Ltd., 164–172, Queen Victoria Street, E.C.4.
77	"Bungalow Elevated" Range	£18 16s.	Richmond Gas Stove and Meter Co., Queen Victoria Street, E.C.4.
78	"Stimex" gas cooker . .	From £9 9s.	Stimex Gas Stove Co., Stimex Hill, Balham Hill, S.W.12.
79	"Wifesjoie" cooker . . .	£4	London Warming Co., 20, Newman Street, Oxford Street, W.1.
79	"Valor-Perfection" oil cooker	From £1 9s. 6d.	Wm. Whiteley, Westbourne Grove, W.1.
79	"Multicooker"	From £2 5s.	Multicooker Inventions, 42, Berners Street, W.1.
79	"Duck" oven	From £2 17s. 6d.	J. Glover & Sons, 60, Frogmore, Wandsworth, S.W.
80	"Supremoil" stove . . .	£1 10s.	Supremoil Stove and Burner Co., Heath Town, Wolverhampton; and 21, Tothill Street, S.W.1.
80	"B.P." oil stove	£2 2s. (oven £4 4s.)	British Petroleum Co., 3, New London Street, E.C.3.
80	"Belling" breakfast cooker .	£2 18s.	Belling & Co., Derby Road Works, Edmonton, N.18.
81	"British Queen" fuel-less cooker	From £4 4s.	British Home Utilities Co., Britannia House, Cross Street, Farringdon Road, E.C.2.
88	"Tileonite"	24 in. × 18 in. sheets, 3s. 9d.	Steleonite Metal Stamping Co., Old Ford, E.3.
88	"Emdeca" metal sheets (22 in. × 16½ in.)	3s. 9d.	Emdeca Metal Decoration Co., 97, Queen Victoria Street, E.C.4.
88	"Matone" flat wall finish . .		Lewis Berger & Sons, Homerton, E.9.
91	"Necolustre"		Necol Industrial Collodions, Windsor House, Victoria Street, S.W.
91	"Tao-Ti"	1s. 6d.	Protao, 88, Leadenhall Street, E.C.3.
92	Enamelled taps	From £1	Doulton & Co., Lambeth, S.E.
94	Wilmot's bathroom wall fitting	From 12s. 6d.	S. M. Wilmot & Co., Bristol.
104	"Zorst" vacuum cleaner . .	£4 15s.	Cracknell's Vacuums, Whittall Street Works, Birmingham.
104	"Sweeper-Vac" do. .	£3 3s.	Maple & Co., Tottenham Court Road, W.
104	"Express" do. .	£1 13s.	Do. do.
104	"B.V.C." do.	£5 5s.	British Vacuum Cleaner Co., Parsons Green Lane, S.W.6.
104	"Daisy" do. .	£3 15s.	Daisy Vacuum Cleaner Co., Gravelly Hill, Birmingham.
105	"Daisy No. 2." do. .	£1 15s.	Do. do. do.
108	"Hoover" electric suction sweeper	£16 5s.	Hoover Suction Sweeper Co., 288–292, Regent Street, W.1.
108	"Apex" electric vacuum cleaner	£15	Duncan, Watson & Co., 62, Berners Street, W.1.
108	"Econo" do. .	£27	Do. do. do.
108	"Croydon" do. .	£10 10s.	Electric Suction Cleaner Co., 56, Victoria Street, S.W.1.
109	"Vacuette" do. .	£5 19s. 6d.	L. G. Hawkins & Co., 116, Charing Cross Road, W.C.2.
111	"Red Star" washing machine	£6 15s. + £1 18s. for wringer	Beatty Bros., 55, Holborn Viaduct, E.C.1.
111	"White Cap" electric washer .	£35	Beatty Bros., 55, Holborn Viaduct, E.C.1.

Page No.	Name of Article.	Price.	From whom obtainable.
117	"Rotapex" electric washer .	£42 10*s.*	Duncan, Watson & Co., 62, Berners Street, W.1.
113	"Vowel" hand washer . .	From £6 10*s.*	T. Bradford & Co., 141, High Holborn, W.C.1.
113	"Darenta" do. .	£8 4*s.* (wringer £2 5*s.* extra)	E. Harris & Co., 296–302, High Holborn, W.C.1.
118	Ceiling airing frame . .	10*s.*	Manuel Lloyd & Co., 105a, Seven Sisters Road, N.7.
119	"Acme" folding clothes horse	£1 2*s.*	Acme Patent Ladder Co., Earlsfield, London.
121	"Brayknawt" mangle . . .	£9 9*s.*	Green & Hughes, Oldbury.
122	Gas irons	11*s.* 9*d.*	Davis Gas Stove Co., 60, Oxford Street, W.
122	"Dinky" electric iron . . .	£1 2*s.* 6*d.*	Belling & Co., Derby Road Works, Edmonton, N.18.
124	"Do All" bucket and mop .	11*s.* 6*d.*	J. J. Chettle, 185, King's Cross Road, W.C.1.
124	"Ronuk" home polisher . .		Ronuk, Ltd., Portslade.
125	Rustless Knives	30*s.* to 36*s.* per doz.	
126	"Lansard" knife cleaner . .	16*s.* 6*d.* (ball bearings 4*s.* 6*d.* extra)	The Alexandra Lansard Co., 216–218, Goswell Road, E.C.1.
126	"Besway" do. do. . .	10*s.* 6*d.*	Besway Co., 44–46, Eagle Street, Southampton Road, W.C.
127	"Model" Roaster . . .	£1 5*s.* and £1 10*s.*	Staines Kitchen Equipment Co., 94 and 131, Victoria Street, S.W.
128	"Boilerette"	From 10*s.* 6*d.*	R. W. Welbank, Duplex Works, North Newington, Banbury.
129	Toggle Fork		Staines Kitchen Equipment Co., 94 and 131, Victoria Street, S.W.
129	Potato cutter		Wm. Whiteley, Westbourne Grove, W.
129	"Pyrex" ovenware	1*s.* to 15*s.*	Do. do. do.
130	"Three-minute" bread maker		Selfridge & Co., Oxford Street, W.1.
130	"Olipel" water heater . .	£5 5*s.*	H. Hogg & Son, 5, Church Street, Kensington, W.8.
132	Service wagon with drawers .	£10 5*s.*	Heal & Son, Tottenham Court Road, W.
132	Tea wagon	£10 7*s.* 6d.	Gill & Reigate, Oxford Street, W.
132	"Quicksey" folding service wagon		"Quicksey" Manufacturing Co., Cromwell House, Fulwood Place, High Holborn, W.C.
133	Service hatch with interlocking doors	15*s.*	Comyn Ching & Co. 54, Castle Street, Long Acre, W.C.
138	Hand-power service lift . . .	£10 10*s.*	Hammond Bros. & Champness, 25, Alfreton Street, S.E.17.
140	"Alpine" gas range . . .	£9 19*s.*	Davis Gas Stove Co., 60, Oxford Street, W.1.
	"Sentry" boiler . . No. 1 No. 6	£13 10*s.* £24	Wood, Russell & Co., 34, Oxford Street, W.1.
	"Ideal" do.	From £7	National Radiator Co., Hull, and 439, Oxford Street, W.1.
	"Kalor" do.		R. Jenkins & Co. Rotherham.
	"Beeston"		Beeston Foundry Co., Beeston, Staffs.
	"Hydresse" water-heater .	£9 16*s.*	Smith & Wellstood, 11, Ludgate Circus, E.C.4.
	"Aquita" do. . .		A. Stevenson & Co., 58, Newhaven Road, Edinburgh.
142	"B.T.U. Builder's set" . .	From £15 12*s.* 6*d.*	John Wright & Co., Queen Victoria Street, E.C.
142	"Victor" gas boiler . . .	£9 5*s.*	Thomas Potterton, Cavendish Works, Ravenswood Road, Balham, S.W.12.
143	"Lyn" sink boiler	£4 13*s.*	Richmond Gas Stove and Meter Co., 164, Queen Victoria Street, E.C.4.
144	"New Cottage" water heater .	£14 14*s.*	Parkinson Stove Co., Stetchford, Birmingham, and 129, High Holborn, London, W.C.1.

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